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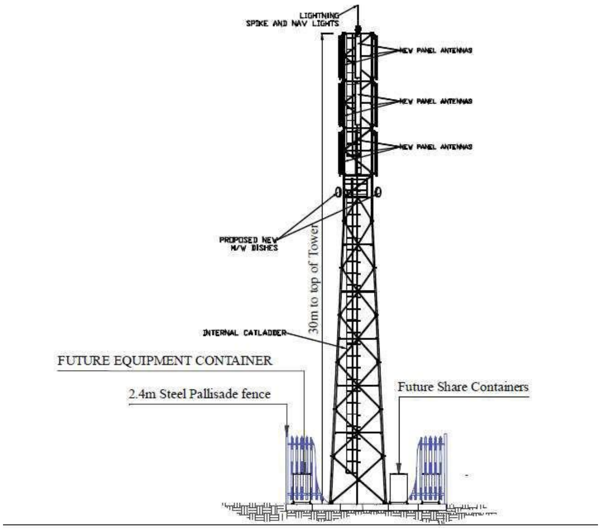
REVISED DRAFT BASIC ASSESSMENT REPORT (BAR) FOR THE PROPOSED CELLULAR TOWER IN OUTENIQUASBOSCH WIDLIFE VILLAGE, HARTENBOS



Compiled by	HilLand Environmental
HilLand Reference	MOS24/455/131s
Date	6 September 2024
Applicant	ZEC4 (PTY) LTD

Western Cape Government

Department of Environmental Affairs and Development Planning

BASIC ASSESSMENT REPORT

THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS.

APRIL 2024

BASIC ASSESSMENT REPORT

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APRIL 2024

(For official use only)	
Pre-application Reference Number (if applicable):	
EIA Application Reference Number:	
NEAS Reference Number:	
Exemption Reference Number (if applicable):	
Date BAR received by Department:	
Date BAR received by Directorate:	
Date BAR received by Case Officer:	

Process undertaken and changes incorporated into the Revised Draft BAR:

Notification of the use of Section 19(1)(b) of NEMA EIA Regulations (2014, as amended) was provided to DEADP (22 August 2024), in order to complete the additional studies that were requested during the public participation process of the draft BAR.

Section 19

Submission of basic assessment report and supporting documents to competent authority –

(1) Where basic assessment must be applied to an application, the applicant must, within 90 days of receipt of the application by the competent authority, submit to the competent authority –

(b) a notification in writing that the documents contemplated in subregulation 1(a) will be submitted within 140 days of receipt of the application by the competent authority, as significant changes have been or significant new information has been added to the documents which changes or information was not contained in the original documents consulted on during the initial public participation process contemplated in subregulation (1) (a) and that the revised documents will be subjected to another public participation process of at least 30 days.

The revised Draft BAR is now made available for a 30-day commenting period.

The following additional information is included into this revised draft BAR:

- **The incorporation of an Electromagnetic Field Predictive Report (appendix Q) and associated health effect information of cellular towers**

GENERAL PROJECT DESCRIPTION

(This must Include an overview of the project including the Farm name/Portion/Erf number)

The proposal entails the construction of a 30m cellular tower on the upper reaches of Outeniquasbosch Wildlife Village, Farm 428, Hartenbos, adjacent to the Monte Christo water reservoir. The area to be set aside for the tower and associated infrastructure will be a fenced off area of 10m x 10m = 100m^2 within which infrastructure will be installed.

BayCorp Holdings approached Outeniquasbosch as part of their investigation of alternatives in order to increase the cellular service connectivity in the area in general.

"As technology advances, there is a greater need/demand for Celltowers due to the limited range each tower/operator can cover from that tower. Planning best practice is using a Radius of 0.8km - 1km for ideal coverage scenarios. This inadvertently steers us to a high demand for more Celltowers as technology advances to reach mobile coverage satiation.

Proximity of Existing Towers

The Closest Existing Tower is located 1.9kms South West of the Planned Tower and provides sparse 2G and 2.5G and 3G coverage with numerous dropped calls and intermittent data access. It should be noted that the Existing Tower is situated an elevation of 54m above Sea Level compared to the planned site located at 143m above Sea Level. The existing Tower is unable to provide the required Coverage and penetration due to the distance as well as Elevation. The next closest existing tower is 2.7kms South East and is too far away to make any contribution to the coverage or penetration. While the demand for fibre connectivity increases, the need for Line-of-Sight(LOS) communications remain high as many services rely on linking Installations via microwave communication links while fibre is being deployed in the various zones/regions. Each mobile network operator makes use of their own fibre systems or alternatively those of their partners, hence the need for microwave communication links.

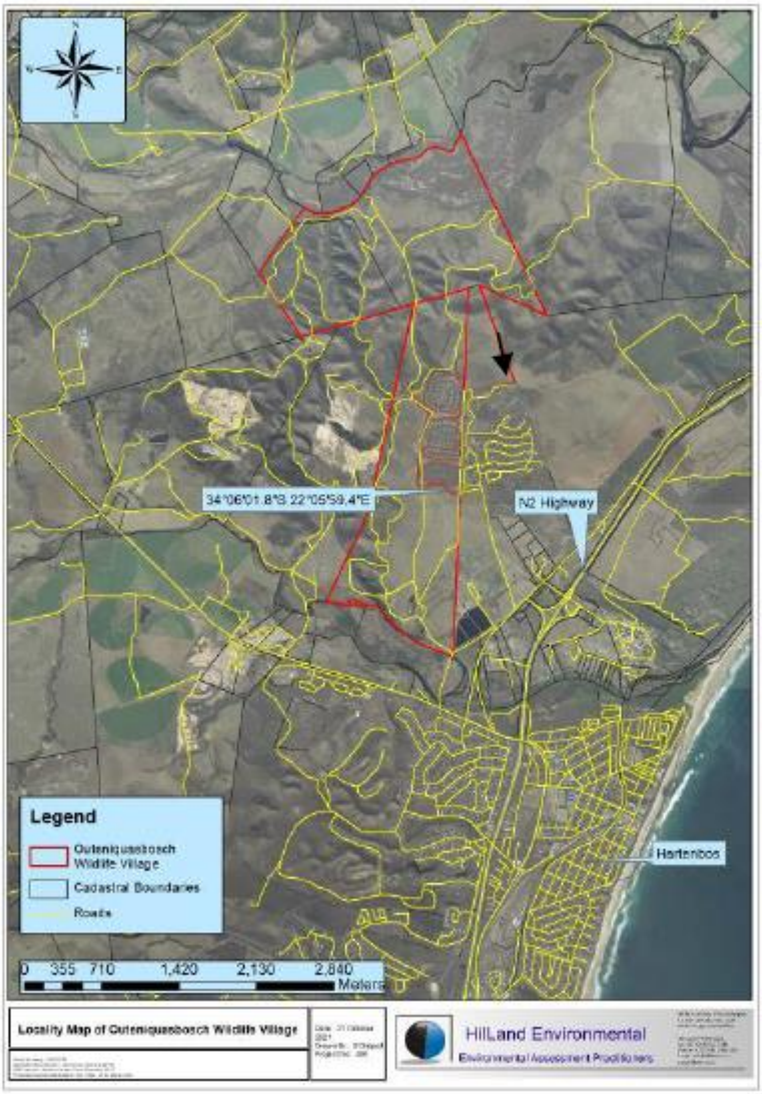
The purpose and intent of the structure is to limit the need for another structure in the vicinity and the planned installation at the Outeniquasbosch Wildlife Village is located as close to the apex of the Hill which is undoubtedly the most ideal location to provide mobile communications coverage as well as high site options for microwave transmission. The tower can provide line of sight microwave transmission to areas as far as Kleinbrak in the East as well as Hartenbos and Voorbaai in the South as well as possible future developments West around the Maandagskop Farm. The site is more that ideally placed and suitably planned to accommodate all Mobile Operators as well as Wireless Internet Service Providers(WISPS) which all have a need to use the tower for coverage and transmission purposes which again supports the need for the most sturdy structure, i.e. lattice tower. It is to be noted that there aren't many stealth options available on a 30m height which limits the selection criterion.

It is to be noted that the demand for Mobile Coverage remains high in demand due to the need for mobile communication. There is no question on how crucial mobile communications services are to our daily lives which connects us to friends and families, enables us to do business on the go as well as connecting entrepreneurs all over the globe to their customers, medical devices now make use of mobile communications systems to receive information/data or provide data and vitals to the medical professionals for monitoring or treatment. We protect, monitor, and secure our homes, places of worship, businesses and schools with the use of Smart Security Systems.

Entertainment has now become easily accessible; Learning is now available online and the Network contains a wealth of information which used to be available only in Libraries. The need for Mobile Connectivity will continuously rise and with that need so will the need for Telecommunications Infrastructure. It is our Opinion that Towers will be regarded as a basic need in the future as we leap headfirst into the 4th Industrial Revolution. The Age of Technological Advancement.

Mrs. Marieta Van Wyk, the Chairlady of the Monte Christo Retirement Village within the Monte Christo Eco Estate has been battling to find a mobile coverage solution for the residents within the retirement village as their Medical Monitoring system runs of a mobile GSM Network System. This Mobile GSM Network system coverage is sporadic which has an adverse effect on those depending on this connectivity which must be regarded as a life-saving need" (BayCorp, 2024)

Various surrounding sites were investigated, and this site was found to be the preferred option.



Locality map of Outeniquasbosch, the position of the proposed tower is highlighted by the black arrow.

Google Earth image highlighting the position of the proposed tower within Outeniquasbosch (BayCorp Holdings, 2023)

Proposed site plan (BayCorp Holdings, 2023)

The site selected has been confirmed to be transformed in terms of Biodiversity and is visually acceptable, located in proximity to the existing municipal reservoir on the crest of the hill providing good coverage to the surrounding residential areas.

IMPORTANT INFORMATION TO BE READ PRIOR TO COMPLETING THIS BASIC ASSESSMENT REPORT

1. **The purpose** of this template is to provide a format for the Basic Assessment report as set out in Appendix 1 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended) in order to ultimately obtain Environmental Authorisation.

2. The Environmental Impact Assessment ("EIA") Regulations is defined in terms of Chapter 5 of the National Environmental Management Act, 19998 (Act No. 107 of 1998) ("NEMA") hereinafter referred to as the "NEMA EIA Regulations".

3. *Submission of documentation, reports and other correspondence:*

   The Department has adopted a digital format for corresponding with proponents/applicants or the general public. If there is a conflict between this approach and any provision in the legislation, then the provisions in the legislation prevail. If there is any uncertainty about the requirements or arrangements, the relevant Competent Authority must be consulted.

The Directorate: Development Management has created generic e-mail addresses for the respective Regions, to centralise their administration. Please make use of the relevant general administration e-mail address below when submitting documents:

DEADPEIAAdmin@westerncape.gov.za
Directorate: Development Management (Region 1):
City of Cape Town; West Coast District Municipal area;
Cape Winelands District Municipal area and Overberg District Municipal area.

DEADPEIAAdmin.George@westerncape.gov.za
Directorate: Development Management (Region 3):
Garden Route District Municipal area and Central Karoo District Municipal area

General queries must be submitted via the general administration e-mail for EIA related queries. Where a case-officer of DEA&DP has been assigned, correspondence may be directed to such official and copied to the relevant general administration e-mail for record purposes.

All correspondence, comments, requests and decisions in terms of applications, will be issued to either the applicant/requester in a digital format via email, with digital signatures, and copied to the Environmental Assessment Practitioner ("EAP") (where applicable).

4. The required information must be typed within the spaces provided in this Basic Assessment Report ("BAR"). The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided.

5. All applicable sections of this BAR must be completed.

6. Unless protected by law, all information contained in, and attached to this BAR, will become public information on receipt by the Competent Authority. If information is not submitted with this BAR due to such information being protected by law, the applicant and/or Environmental Assessment Practitioner ("EAP") must declare such non-disclosure and provide the reasons for believing that the information is protected.

7. This BAR is current as of **April 2024**. It is the responsibility of the Applicant/ EAP to ascertain whether subsequent versions of the BAR have been released by the Department. Visit this Department's website at http://www.westerncape.gov.za to check for the latest version of this BAR.

8. This BAR is the standard format, which must be used in all instances when preparing a BAR for Basic Assessment applications for an environmental authorisation in terms of the NEMA EIA Regulations when the Western Cape Government Department of Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority.

9. Unless otherwise indicated by the Department, one hard copy and one electronic copy of this BAR must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this Report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.

10. This BAR must be duly dated and originally signed by the Applicant, EAP (if applicable) and Specialist(s) and must be submitted to the Department at the details provided below.

11. The Department's latest Circulars pertaining to the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must be taken into account when completing this BAR.

12. Should a water use licence application be required in terms of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA"), the "One Environmental System" is applicable, specifically in terms of the synchronisation of the consideration of the application in terms of the NEMA and the NWA. Refer to this Department's Circular EADP 0028/2014: One Environmental Management System.

13. Where Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA") is triggered, a copy of Heritage Western Cape's final comment must be attached to the BAR.

14. The Screening Tool developed by the National Department of Environmental Affairs must be used to generate a screening report. Please use the Screening Tool link https://screening.environment.gov.za/screeningtool to generate the Screening Tool Report. The screening tool report must be attached to this BAR.

15. Where this Department is also identified as the Licencing Authority to decide on applications under the National Environmental Management: Air Quality Act (Act No. 29 of 2004) ('NEM:AQA"), the submission of the Report must also be made as follows, for-
Waste Management Licence Applications, this report must also (i.e., another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (Tel: 021-483-2728/2705 and Fax: 021-483-4425) at the same postal address as the Cape Town Office.

    Atmospheric Emissions Licence Applications, this report must also be (i.e., another hard copy and electronic copy) submitted for the attention of the Licensing Authority or this Department's Air Quality Management Directorate (Tel: 021 483 2888 and Fax: 021 483 4368) at the same postal address as the Cape Town Office.

DEPARTMENTAL DETAILS	
CAPE TOWN OFFICE: **DIRECTORATE: DEVELOPMENT MANAGEMENT (REGION 1)** (City of Cape Town, West Coast District, Cape Winelands District & Overberg District)	**GEORGE REGIONAL OFFICE:** **DIRECTORATE: DEVELOPMENT MANAGEMENT (REGION 3)** (Central Karoo District & Garden Route District)
The completed Form must be sent via electronic mail to: DEADPEIAAdmin@westerncape.gov.za Queries should be directed to the Directorate: Development Management (Region 1) at: E-mail: DEADPEIAAdmin@westerncape.gov.za Tel: (021) 483-5829 Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1) Private Bag X 9086 Cape Town, 8000	The completed Form must be sent via electronic mail to: DEADPEIAAdmin.George@westerncape.gov.za Queries should be directed to the Directorate: Development Management (Region 3) at: E-mail: DEADPEIAAdmin.George@westerncape.gov.za Tel: (044) 814-2006 Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530

MAPS

Provide a location map (see below) as Appendix A1 to this BAR that shows the location of the proposed development and associated structures and infrastructure on the property.	
Locality Map:	The scale of the locality map must be at least 1:50 000. For linear activities or development proposals of more than 25 kilometres, a smaller scale e.g., 1:250 000 can be used. The scale must be indicated on the map. The map must indicate the following: • an accurate indication of the project site position as well as the positions of the alternative sites, if any; • road names or numbers of all the major roads as well as the roads that provide access to the site(s) • a north arrow; • a legend; and • a linear scale. For ocean based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken.

	Where comment from the Western Cape Government: Transport and Public Works is required, a map illustrating the properties (owned by the Western Cape Government: Transport and Public Works) that will be affected by the proposed development must be included in the Report.
Provide a detailed site development plan / site map (see below) as Appendix B1 to this BAR; and if applicable, all alternative properties and locations.	

Site Plan:	Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following:
	• The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be clearly indicated on the plan, preferably together with a linear scale.
	• The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan.
	• On land where the property has not been defined, the co-ordinates of the area in which the proposed activity or development is proposed must be provided.
	• The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be clearly indicated on the site plan.
	• The position of each component of the proposed activity or development as well as any other structures on the site must be indicated on the site plan.
	• Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the proposed development **<u>must</u>** be clearly indicated on the site plan.
	• Servitudes and an indication of the purpose of each servitude must be indicated on the site plan.
	• Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to):
	  o Watercourses / Rivers / Wetlands
	  o Flood lines (*i.e.*, 1:100 year, 1:50 year and 1:10 year where applicable);
	  o Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"):
	  o Ridges;
	  o Cultural and historical features/landscapes;
	  o Areas with indigenous vegetation (even if degraded or infested with alien species).
	• Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted.
	• North arrow
	
	A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas.

Site photographs	Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as **Appendix C**. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.
Biodiversity Overlay Map:	A map of the relevant biodiversity information and conditions must be provided as an overlay map on the property/site plan. The Map must be attached to this BAR as **Appendix D**.
Linear activities or development and multiple properties	GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek 94 WGS84 co-ordinate system. Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix. For linear activities that are longer than 500m, please provide a map with the co-ordinates taken every 100m along the route to this BAR as **Appendix A3**.

ACRONYMS

DAFF:	Department of Forestry and Fisheries
DEA:	Department of Environmental Affairs
DEA& DP:	Department of Environmental Affairs and Development Planning
DHS:	Department of Human Settlement
DoA:	Department of Agriculture
DoH:	Department of Health
DWS:	Department of Water and Sanitation
EMPr:	Environmental Management Programme

HWC:	Heritage Western Cape
NFEPA:	National Freshwater Ecosystem Protection Assessment
NSBA:	National Spatial Biodiversity Assessment
TOR:	Terms of Reference
WCBSP:	Western Cape Biodiversity Spatial Plan
WCG:	Western Cape Government

ATTACHMENTS

Note: The Appendices must be attached to the BAR as per the list below. Please use a ✓ **(**tick) or a **x** (cross) to indicate whether the Appendix is attached to the BAR.

The following checklist of attachments must be completed.

APPENDIX			**✓ (Tick) or x (cross)**
Appendix A:	**Maps**		
	Appendix A1:	**Locality Map**	✓
	Appendix A2:	**Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning**	N/A
	Appendix A3:	**Map with the GPS co-ordinates for linear activities**	N/A
Appendix B:	**Appendix B1:**	**Site development plan(s)**	✓
	Appendix B2	**A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas;**	✓
Appendix C:	**Photographs**		✓
Appendix D:	**Biodiversity overlay map**		✓
Appendix E:	**Permit(s) / license(s) / exemption notice, agreements, comments from State Department/Organs of state and service letters from the municipality.**		
	Appendix E1:	**Final comment/ROD from HWC**	Not required comments included
	Appendix E2:	**Copy of comment from Cape Nature**	✓
	Appendix E3:	**Final Comment from the DWS**	✓
	Appendix E4:	**Comment from the DEA: Oceans and Coast**	N/A
	Appendix E5:	**Comment from the DAFF**	N/A
	Appendix E6:	**Comment from WCG: Transport and Public Works**	N/A

	Appendix E7:	**Comment from WCG: DoA**	None received
	Appendix E8:	**Comment from WCG: DHS**	N/A
	Appendix E9:	**Comment from WCG: DoH**	None received
	Appendix E10:	**Comment from DEA&DP: Pollution Management**	N/A
	Appendix E11:	**Comment from DEA&DP: Waste Management**	N/A
	Appendix E12:	**Comment from DEA&DP: Biodiversity**	N/A
	Appendix E13:	**Comment from DEA&DP: Air Quality**	N/A
	Appendix E14:	**Comment from DEA&DP: Coastal Management**	N/A
	Appendix E15:	**Comment from the local authority**	✓
	Appendix E16:	**Confirmation of all services (water, electricity, sewage, solid waste management)**	Not required
	Appendix E17:	**Comment from the District Municipality**	✓
	Appendix E18:	**Copy of an exemption notice**	N/A
	Appendix E19	**Pre-approval for the reclamation of land**	N/a
	Appendix E20:	**Proof of agreement/TOR of the specialist studies conducted.**	See App. G
	Appendix E21:	**Proof of land use rights**	✓
	Appendix E22:	**Proof of public participation agreement for linear activities**	N/A
Appendix F:	**Public participation information: including a copy of the register of I&APs, the comments and responses Report, proof of notices, advertisements and any other public participation information as is required.** **Annexure A** – Notification of Neighbouring Properties **Annexure B** – Legal Advert & Site Notice **Annexure C** – List of Registered I&AP's **Annexure D** – Notification of the Draft BAR **Annexure E** – Landowner letters **Annexure F** – Comments received on Draft BAR **Annexure G** – Response to Municipal comments **Annexure H** – Notification of the revised Draft BAR		✓

<table>
<tr><td>Appendix G:</td><td>Specialist Report(s)
- Terrestrial-and aquatic biodiversity, plant and animal species compliance Statement
- Visual Impact Assessment</td><td>✓</td></tr>
<tr><td>Appendix H:</td><td>EMPr
<table>
<tr><td>Annexure A</td><td>Locality Map</td></tr>
<tr><td>Annexure B</td><td>Site plan</td></tr>
<tr><td>Annexure C</td><td>“No-Go” Map</td></tr>
<tr><td>Annexure D</td><td>Environmental Induction Sheet and Register</td></tr>
<tr><td>Annexure E</td><td>Method Statement Form</td></tr>
<tr><td>Annexure F</td><td>Register of Rescued Indigenous Vegetation</td></tr>
<tr><td>Annexure G</td><td>CV of EAPs</td></tr>
</table></td><td>✓</td></tr>
<tr><td>Appendix I:</td><td>Screening tool report and SSVR (as submitted with application)</td><td>✓</td></tr>
<tr><td>Appendix J:</td><td>The impact and risk assessment for each alternative</td><td>Included in this report</td></tr>
<tr><td>Appendix K:</td><td>Need and desirability for the proposed activity or development in terms of this Department’s guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline</td><td>Included in this report</td></tr>
<tr><td>Appendix L</td><td>Planning report and annexures</td><td>✓</td></tr>
<tr><td>Appendix M</td><td>SACAA approval</td><td>✓</td></tr>
<tr><td>Appendix N</td><td>BayCorp report</td><td>✓</td></tr>
<tr><td>Appendix O</td><td>Resident requests</td><td>✓</td></tr>
<tr><td>Appendix P</td><td>CV of EAPs</td><td>✓</td></tr>
<tr><td>Appendix Q</td><td>Electromagnetic Field Predictive Report
Department of Health Statement</td><td>✓</td></tr>
</table>

SECTION A: ADMINISTRATIVE DETAILS

Highlight the Departmental Region in which the intended application will fall	CAPE TOWN OFFICE: REGION 1		**GEORGE OFFICE: BEGION 3**
	(City of Cape Town, West Coast District	(Cape Winelands District & Overberg District)	**(Central Karoo District & Garden Route District)**

Duplicate this section where there is more than one Proponent Name of Applicant/Proponent:	**ZEC4 (PTY) LTD represented by Mr D van Zyl**	
Name of contact person for Applicant/Proponent (if other):	**Dreyer Pieter van Zyl**	
Company/ Trading name/State Department/Organ of State:	**ZEC 4 (PTY) LTD**	
Company Registration Number:	**2005/030913/07**	
Postal address:	**PO Box 154, Hartenbos**	
	Mossel Bay	Postal code: **6520**
Telephone:	( )	Cell: **+27(0) 825586589**
E-mail:	**dreyer@dreyervanzyl.com**	Fax: ( )
Company of EAP:	**HilLand Environmental (Pty) Ltd**	
EAP name:	**Inge Delport/ Cathy Avierinos**	
Postal address:	**PO Box 590,**	
	George	Postal code: **6530**
Telephone:	**0448890229**	Cell: **0825586589**
E-mail:	**cathy@hilland.co.za/ environmental@hilland.co.za**	Fax: **0865425248**
Qualifications:	**BSc Hons**	
EAP registration no:	**Inge 2019/1689**	
Duplicate this section where there is more than one landowner Name of landowner:	**Same as proponent**	
Name of contact person for landowner (if other):		
Postal address:		
		Postal code:
Telephone:	( )	Cell:
E-mail:		Fax: ( )
Name of Person in control of the land:	**Same as proponent**	
Name of contact person for person in control of the land:		
Postal address:		
		Postal code:
Telephone:	( )	Cell:
E-mail:		Fax: ( )

Duplicate this section where there is more than one Municipal Jurisdiction Municipality in whose area of jurisdiction the proposed activity will fall:	**Mossel Bay Municipality**	
Contact person:	**MM – Conlin Puren**	
Postal address:	**Private Bag X29**	
	Mossel Bay	Postal code: **6500**
Telephone	+27(0) **446065000**	Cell:
E-mail:	**admin@mosselbay.gov.za**	Fax: ( )

SECTION B: CONFIRMATION OF SPECIFIC PROJECT DETAILS AS INLCUDED IN THE APPLICATION FORM

1.	Is the proposed development (please tick):	New	✓	Expansion	
2.	Is the proposed site(s) a brownfield of greenfield site? Please explain.				
Greenfields **Although within the Outeniquasbosch Wildlife Village, the area forms part of internal open space area adjacent to other utilities, but is not developed**					
3.	**For Linear activities or developments**				
3.1.	Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:				
3.2.	Development footprint of the proposed development for all alternatives.	m²			
3.3.	Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.				
3.4.	Indicate how access to the proposed routes will be obtained for all alternatives.				

3.5.	SG Digit codes of the Farms/Farm Portions/Erf numbers for all alternatives																					

3.6.	**Starting point co-ordinates for all alternatives**			
	Latitude (S)	°	‘	“
	Longitude (E)	°	‘	“
	Middle point co-ordinates for all alternatives			
	Latitude (S)	°	‘	“
	Longitude (E)	°	‘	“
	End point co-ordinates for all alternatives			
	Latitude (S)	°	‘	“
	Longitude (E)	°	‘	“
Note: For Linear activities or developments longer than 500m, a map indicating the co-ordinates for every 100m along the route must be attached to this BAR as Appendix A3.				

4.	**Other developments**	
4.1.	Property size(s) of all proposed site(s):	**526ha farm (526 0000m^2)**
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):	**The tower will be situated in an existing approved estate, however, there is no existing infrastructure associated with the tower**
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:	**100m^2 for the tower and associated infrastructure (area to be fenced)** **Proposed access track to the site: 61m length x 2m = 122m^2**
4.4.	Provide a detailed description of the proposed development and its associated infrastructure (This must include details of e.g. buildings, structures, infrastructure, storage facilities, sewage/effluent treatment and holding facilities).	

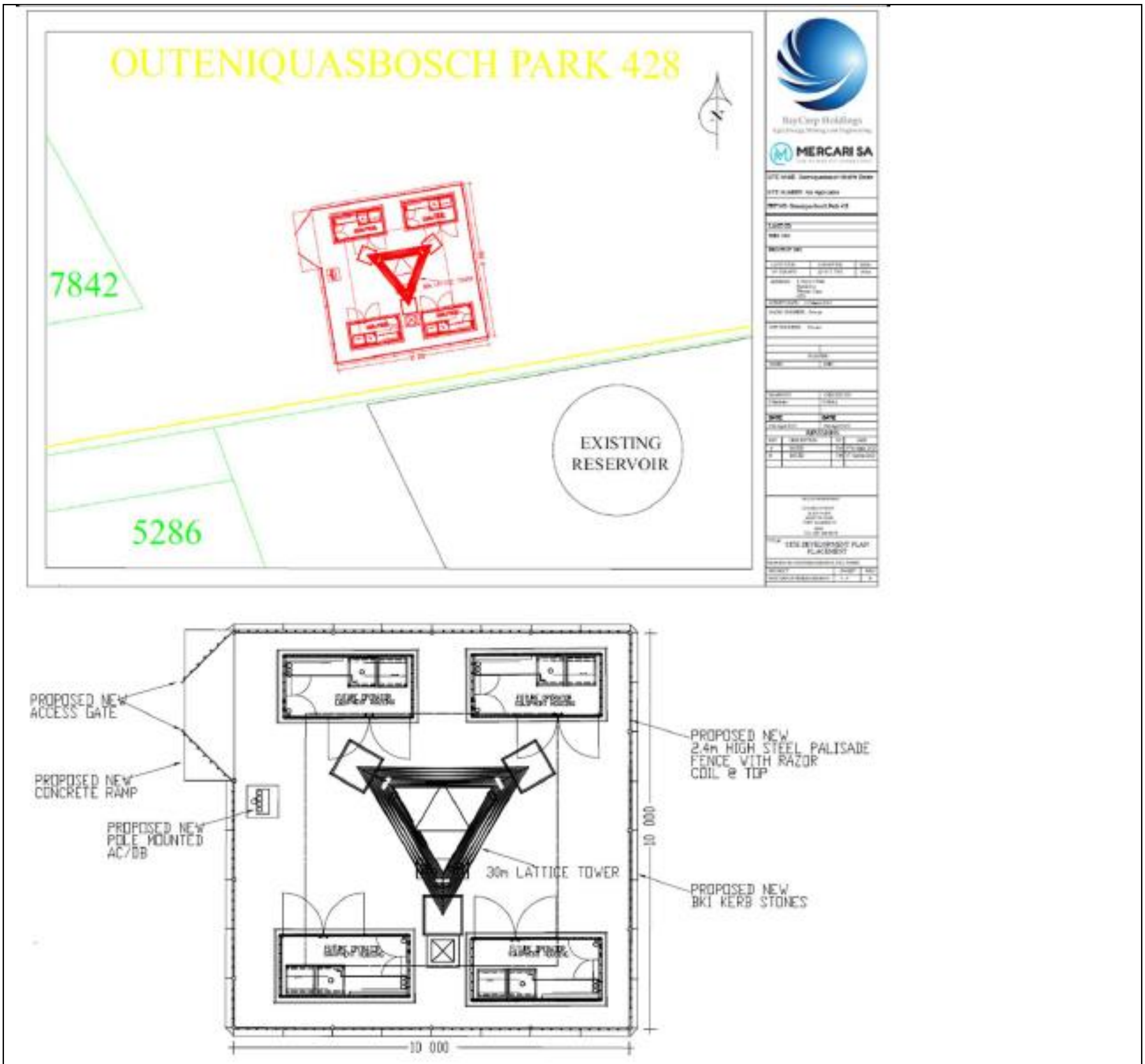
The proposal entails the construction of a cellular tower within Outeniquasbosch Wildlife Village. The 30m tower will be situated adjacent to the municipal reservoir site which falls just outside Outeniquasbosch.

The following will be constructed:

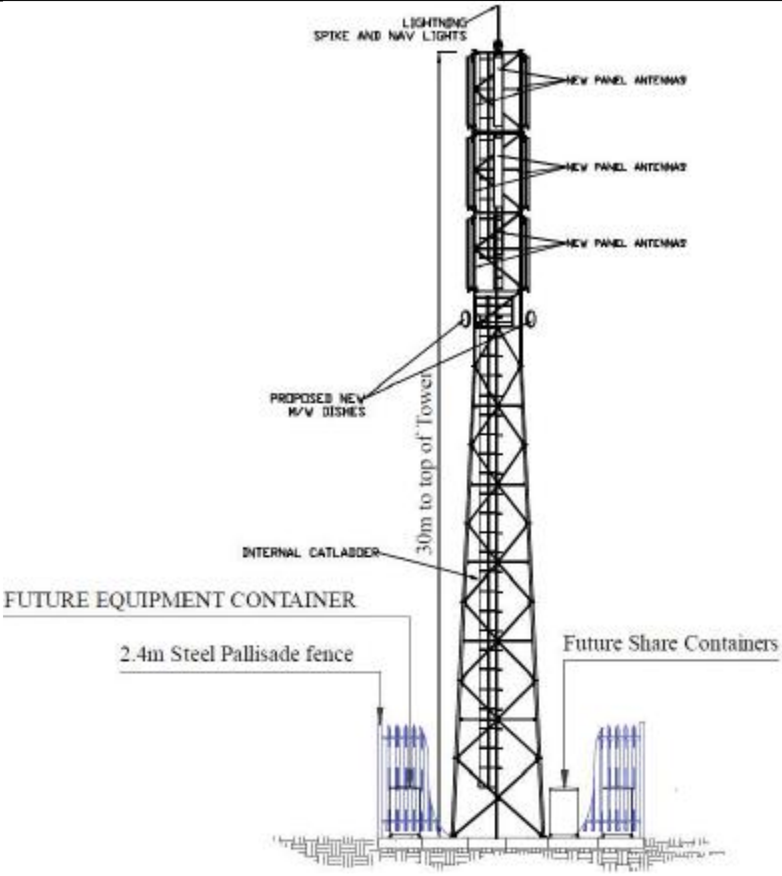
- **30m Lattice tower**
- **Associated infrastructure such as operator equipment**
- **The 10mx10m area will be fenced with palisade fencing, kerbstones and a gate**
- **2-track to access the site**

Locality map of Outeniquasbosch, the position of the proposed tower is highlighted by the black arrow

Proposed site in relation to the surrounding residential properties and adjacent municipal water reservoir



Proposed site development plan for the cellular tower (BayCorp Holdings, 2023)

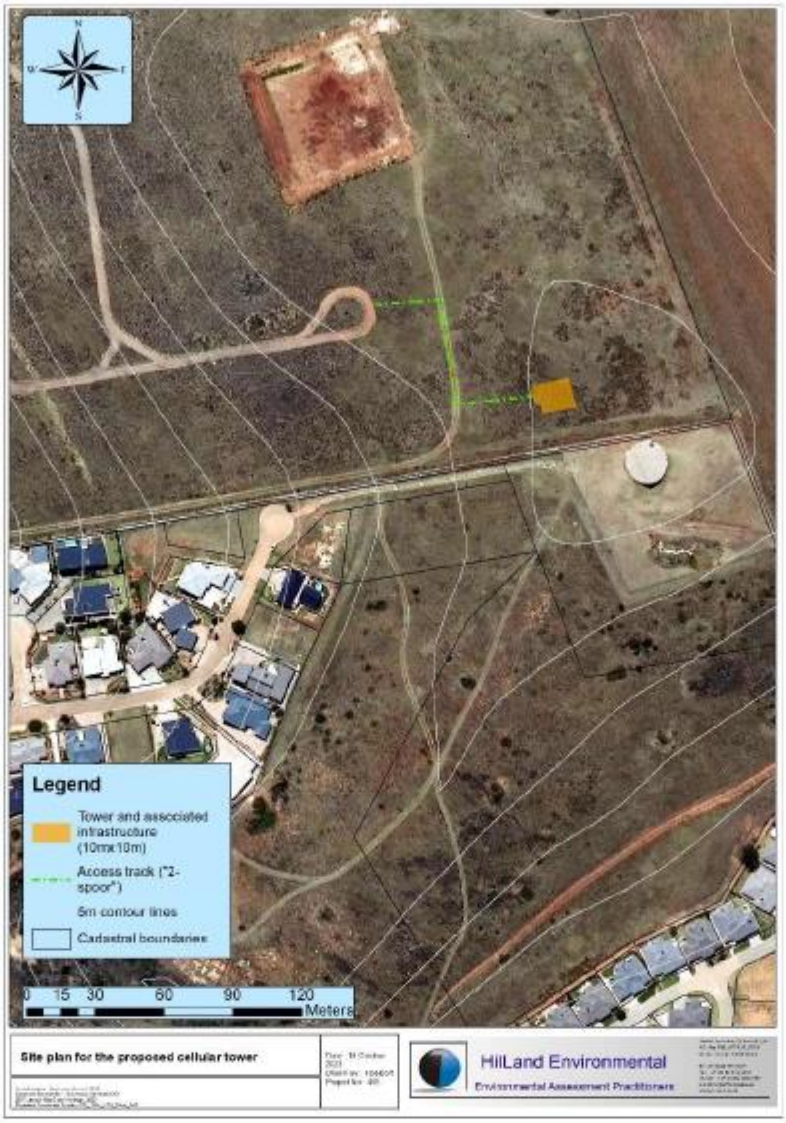


Elevation view of the proposed tower (BodyCorp Holdings, 2023)

The proposed development footprint (10x10 m) will be within old transformed agricultural land that are now included as Open space zone II as part of the Outeniquasbosch SDP.

Access to the site for construction and servicing is recommended off the internal residential road as indicated on the figure provided at point 4.5.

4.5.	Indicate how access to the proposed site(s) will be obtained for all alternatives.
An access track from the internal residential road is proposed. The use of grass blocks (for erosion mitigation where needed) and a 2-track road is recommended	



Site plan showing the **indicative** access track to the site in green

Proposed site in relation to the surrounding residential estates					
4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:	**C05100000000042800000**			
4.7.	Coordinates of the proposed site(s) for all alternatives:				
	Latitude (S)		**34°**	**5'**	**28.61"**
	Longitude (E)		**22°**	**6'**	**17.51"**

SECTION C: LEGISLATION/POLICIES AND/OR GUIDELINES/PROTOCOLS

1. Exemption applied for in terms of the NEMA and the NEMA EIA Regulations

Has exemption been applied for in terms of the NEMA and the NEMA EIA Regulations. If yes, include a copy of the exemption notice in Appendix E18.	YES	NO

2. Is the following legislation applicable to the proposed activity or development.

The National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"). If yes, attach a copy of the comment from the relevant competent authority as Appendix E4 and the pre-approval for the reclamation of land as Appendix E19.	YES	NO
The National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA"). If yes, attach a copy of the comment from Heritage Western Cape as Appendix E1.	YES	NO
The National Water Act, 1998 (Act No. 36 of 1998) ("NWA"). If yes, attach a copy of the comment from the DWS as Appendix E3.	YES	NO
The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA"). If yes, attach a copy of the comment from the relevant authorities as Appendix E13.	YES	NO
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")	YES	NO
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA").	YES	NO
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").	YES	NO
The Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983). If yes, attach comment from the relevant competent authority as Appendix E5.	YES	NO

3. Other legislation

List any other legislation that is applicable to the proposed activity or development.
In order to obtain land development rights for the proposed development, the following land development application will have to be lodged to Mossel Bay Municipality: ***(i) Application for a consent use to allow a freestanding base telecommunication station on the Farm Outeniquasbosch Park No. 428 in terms of Section 15(m) of the Mossel Bay Land Use Planning Bylaw, 2021*** ***(ii) Application for a permanent departure for the relaxation of the prescribed height from 15m to 30m to allow a freestanding base telecommunication station on the Farm Outeniquasbosch Park No. 428 in terms of Section 15(b) of the Mossel Bay Land Use Planning Bylaw, 2021*** ***(iii) Confirmation of exemption to register a use servitude for a freestanding base telecommunication base station in terms of Section 24(1)(f)(ii) of the Mossel Bay Land Use Planning Bylaw, 2021***

4. Policies

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.
• **Western Cape Spatial Biodiversity Plan (CapeNature, 2017) - the proposed development is within the scope of the WCSBP** • **Mossel Bay Spatial Development Framework (SDF) - the proposal is consistent with the Mossel Bay SDF** • **Mossel Bay Municipality Integrated Development Plan (IDP) - the proposal is consistent with the Mossel Bay IDP** • **Western Cape Provincial SDF (2014) - the proposal is consistent with the Provincial SDF**

5. Guidelines

List the guidelines which have been considered relevant to the proposed activity or development and explain how they have influenced the development proposal.

Guideline	How the proposed development complies with and responds
Circular EADP 0028/2014:One Environmental Management System	In terms of the "One Environmental System" fixed timeframes for the consideration and issuing of decisions in terms of the respective legislation was agreed to and the processes to be followed in terms of the respective legislation have been synchronised and integrated. This circular was applied in the BAR process.
Guideline for involving visual and aesthetic specialists in the EIA process (June 2005)	This guideline was used for the review of specialist input and the verification of sensitivities.
DEA&DP (2013) Guideline on Public Participation (EIA Guideline and Information Document Series): Western Cape DEA&DP, March 2013	The public participation process for the project will follow the requirements of the guideline and the guideline was used to compile the Public Participation Report (Appendix F).
DEA&DP (2013) Guideline on Alternatives (EIA Guideline and Information Document Series): Western Cape DEA&DP, March 2013	This guideline was used to assess and determine alternatives for the project. Due to specialist input, historic approval and need and desirability, no alternatives have been proposed other than the Preferred and No-Go Alternative. The alternatives assessed in this report fall within the requirements of the guidelines.
DEA&DP (2013) Guideline on Need and Desirability (EIA Guideline and Information Document Series): Western Cape DEA&DP, March 2013	This guideline was considered when considering the need and desirability of the proposed project. The guideline was used to complete the section on need and desirability and the need and desirability assessed within this report fall within the requirements of the guideline.
DEA&DP (2005) Guideline on Environmental Management Plans	This guideline was considered for the compilation of the EMPr (Appendix H to form part of the draft BAR) and the EMPr fall within the requirements of the guideline.
Guideline for determining the scope of specialist involvement in EIA processes, guideline for the review of specialist input in the EIA process and guideline for involving biodiversity specialist in the EIA process (June, 2005)	The report falls within the requirements of these guidelines and was used to determine the need for specialist involvement and within the review process of the subsequent reports and inputs. Specialist assessments/verifications applicable: - Terrestrial and aquatic biodiversity (plants and animals) Visual statement
Guideline for review of specialist input in the EIA process (June 2005)	This guideline was used for the review of specialist input and the verification of sensitivities.
Integrated Environmental Management Information Series 5: Impact Significance (2002)	The impact significant used within this report fall within the requirements of the guideline and the guideline was used to identify and evaluate the potential impact associated with the proposed development.
Integrated Environmental Management Information Series 7: Cumulative Effects (2004)	The cumulative effect assessed within this report fall within the requirements of the guideline and the guideline was used to assess the cumulative effects of the identified impacts.

Department of Environmental Affairs Screening Tool and protocols	The screening tool was used to inform the need for specialist studies. Please refer to the screening tool report and applicability considerations.
National Environmental Management Act, 1998 (Act No 107 of 1998): Procedures to be followed for the assessment and minimum criteria for reporting of identified environmental themes in terms of Section 24(5)(a) and (h) of the National Environmental Management Act, 1998, when applying for environmental authorisation.	The procedures were followed to determine the need for specialist studies based on the outcome of the screening tool report and site sensitivity verification.
Guideline on generic terms of Reference for EAPs and Project Schedules (March 2013)	The generic terms of reference and schedules outlined in this guideline was applied during the BA process.
Western Cape Land Use Planning Guideline: Rural Areas (2019)	The objectives of the guideline were assessed to determine if the proposal is in line with the guideline.

6. Protocols

Explain how the proposed activity or development complies with the requirements of the protocols referred to in the NOI and/or application form
As included in the site sensitivity verification report. **The screening tool identified the following impact assessments based on the selected classification and environmental sensitivities:** • **Terrestrial biodiversity compliance statement (terrestrial biodiversity assessment protocol); specialist appointed in accordance with the protocols.** • **Aquatic biodiversity compliance statement (aquatic biodiversity assessment protocol); specialist appointed in line with the protocols.** • **Plant species compliance statement (plant species assessment protocol); covered by the terrestrial biodiversity specialist.** • **Animal species compliance statement (animal species assessment protocol); covered by the terrestrial biodiversity specialist.** • **Visual compliance statement (general protocol); specialist appointed in accordance with the protocol.**

SECTION D: APPLICABLE LISTED ACTIVITIES

List the applicable activities in terms of the NEMA EIA Regulations

Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Listing Notice 1**	Describe the portion of the proposed development to which the applicable listed activity relates.
3	**The development of masts or towers of any material or type used for telecommunication broadcasting or radio transmission purposes where the mast or tower—** **(a) is to be placed on a site not previously used for this purpose; and** **will exceed 15 metres in height—** but excluding attachments to existing buildings and masts on rooftops. **i. Western Cape** **i. All areas outside urban areas;** ii. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose, within urban areas; or **Areas zoned for use as public open space or equivalent zoning within urban areas.**	**The tower will be 30m in height and on a site that has not been used for this purpose.** **The site itself falls outside an urban area (although located within Outeniquasbosch which is approved development and adjacent to Monte Christo).** **The site selected forms part of an area demarcated for Private Open space zone II in accordance with Outeniquasbosch SDP.**
Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Listing Notice 3**	Describe the portion of the proposed development to which the applicable listed activity relates.
None		

Note: • The listed activities specified above must reconcile with activities applied for in the application form. The onus is on the Applicant to ensure that all applicable listed activities are included in the application. If a specific listed activity is not included in an Environmental Authorisation, a new application for Environmental Authorisation will have to be submitted. • Where additional listed activities have been identified, that have not been included in the application form, and amended application form must be submitted to the competent authority.

List the applicable waste management listed activities in terms of the NEM:WA

Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Category A**	Describe the portion of the proposed development to which the applicable listed activity relates.

List the applicable listed activities in terms of the NEM:AQA

Activity No(s):	Provide the relevant **Listed Activity(ies)**	Describe the portion of the proposed development to which the applicable listed activity relates.

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1.	Provide a description of the preferred alternative.
The preferred alternative entails the construction of a 30m cellular towner on the upper reached of Outeniquasbosch Wildlife Village **The following will be constructed:** - **30m Lattice tower** - **Associated infrastructure such as operator equipment** - **The 10mx10m area will be fenced with palisade fencing, kerbstones and a gate** - **A 2-track will be provided to access the site**	
2.	Explain how the proposed development is in line with the existing land use rights of the property as you have indicated in the NOI and application form? Include the proof of the existing land use rights granted in Appendix E21.
The property is approved for residential development – Outeniquasbosch Wildlife Village (environmental authorisation and planning approvals are in place). The site is currently zoned as Open Space II (private open space). **A planning application is being made for the consent use for a freestanding base communication station in private open space and departure for the allowance of a 30m tower within the urban edge**	
3.	Explain how potential conflict with respect to existing approvals for the proposed site (as indicated in the NOI/and or application form) and the proposed development have been resolved.
The proposal does not conflict with the existing approval, the site selected is within an open space II and a consent use application will be made	
4.	Explain how the proposed development will be in line with the following?
4.1	The Provincial Spatial Development Framework.
As extracted from the Planning report (Vreken, 2023): *The Western Cape Provincial SDF was approved in 2014 by the Western Cape Parliament and serves as a strategic spatial planning tool that "communicates the provinces spatial planning agenda". The Western Cape Province's Strategic objectives include:* *Educating Cape: Everyone has access to a good education, and the cities, towns and rural villages are places of innovation and learning.* *Green Cape: All households can access basic services that are delivered resource efficiently, and residents use land and finite resources prudently and safeguard their ecosystems.* *Connecting Cape: Urban and rural communities are inclusive, integrated, connected and collaborative.* *Living Cape: Living and working environments are healthy, safe, enabling and accessible, and all have access to the region's unique lifestyle offering.* *Leading Cape: Urban and rural areas are effectively managed.* *The PSDF sets out a policy framework within which the Western Cape Government will carry out its spatial planning responsibilities. Each of the three spatial themes contributes to the achievement of the Western Capes's strategic objectives. These policies are categorised into three themes, namely:* *Resources: Sustainable use of spatial assets and resources* *Space Economy: Opening up Opportunities in the Space Economy* *Settlement: Developing Integrated and sustainable settlements* *For each theme, key challenges as distilled from the Provincial spatial profile and their spatial implications are noted and Provincial policies for dealing with them are presented. These themes and policies are summarised in the figure below.*	

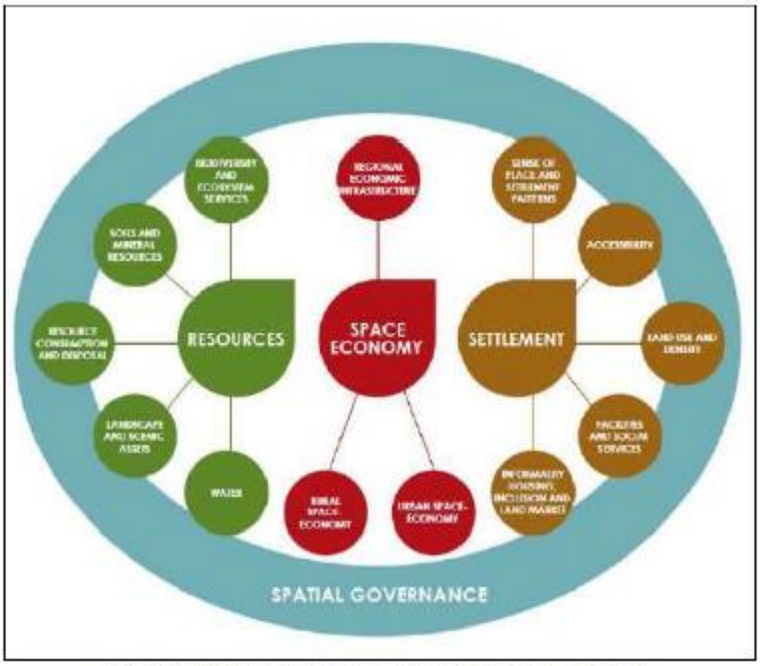


FIGURE 15: POLICIES APPLICABLE TO THE PROPOSED DEVELOPMENT

The proposed development complements the SDF's spatial goals that aim to take the Western Cape on a path towards: i Greater productivity, competitiveness and opportunities within the spatial economy.

It is important to note some of the key policies laid down by the Western Cape PSDF have a bearing on this application.

POLICY R1: PROTECT BIODIVERSITY & ECOSYSTEM SERVICES

POLICY STATEMENT	DEVELOPMENT'S RESPONSE
This policy reflects on securing fragmental natural habitats, it is necessary to prevent further intrusion of agricultural activity or urban expansion into key Critical Biodiversity Areas and ecological support areas. this policy helps to prevent any development in these unique environments and to preserve and protect the natural habitat.	▪ *The proposed location of the development, stayed clear on the protected areas, thus indicating the commitment of the development to comply with any environmental constraints.*

POLICY E3: REVITALISE AND STRENGTHEN URBAN SPACE-ECONOMIES AS THE ENGINE OF GROWTH

POLICY STATEMENT	DEVELOPMENT'S RESPONSE
5. Existing economic assets (e.g. CBDs, township centres, modal interchanges, vacant and under-utilised strategically located public land parcels, fishing harbours, public squares and markets, etc.) to be targeted to lever the regeneration and revitalisation of urban economies.	▪ *This is a strategically located site that will be developed with an appropriate land use, contributing to the provision of network services in the surrounding area.*

POLICY R1: PROTECT BIODIVERSITY AND ECOSYSTEM SERVICES

POLICY STATEMENT	DEVELOPMENT'S RESPONSE
1. Continue to use CBA mapping to inform spatial planning and land use management decisions in the Province.	▪ *The proposed location is not within any CBA areas and sensitive areas.*

POLICY R5: SAFEGUARD CULTURAL AND SCENIC ASSETS

POLICY STATEMENT	DEVELOPMENT'S RESPONSE
Priority focus areas proposed for conservation or protection include: ▪ Rural landscapes of scenic and cultural significance situated on major urban edges and under increasing development pressure, e.g. Cape Winelands ▪ Undeveloped coastal landscapes under major development pressure ▪ Landscapes under pressure for large-scale infrastructural developments such as wind farms, solar energy facilities, transmission lines and fracking, e.g. Central Karoo ▪ Vulnerable historic mountain passes and 'poorts'	▪ *The proposed telecommunication mast of the development, stayed clear of the protected areas, thus indicating the commitment of the development to comply with any environmental constraints.*

POLICY S2: IMPROVE INTER AND INTRAREGIONAL ACCESSIBILITY

POLICY STATEMENT	DEVELOPMENT'S RESPONSE
1. Built environment investment programmes to focus on compacting and **connecting** urban development (especially along public transport routes), and clustering public facilities along these connections.	▪ *The proposal will result in better connectivity for residents of the Hartenbos basin.*
9. Roll-out the Western Cape Government's Green Economy and **broadband programmes,** particularly related to building and services applications. New technologies offer the prospects of making living in and working out of rural towns and villages more attractive.	▪ *The proposal to improve connectivity via a cellmast that can accommodate various mobile network operators, is compliant with this policy statement.*

Planning Implication
The Western Cape Spatial Development framework has a strong emphasis on revitalising urban spaces creating an urban living environment that is more convenient, efficient and aesthetically pleasing to residents. The proposal is consistent with strategic objectives as set out by the Western Cape Spatial Development Framework, for the following reasons:

The development proposal will comply with the Western Cape Spatial Development Framework as the proposed Cell Tower will contribute to the provision of adequate network services in the area. *The proposed development is within the urban edge of Mossel Bay Municipality and situated within an existing urban footprint.* *From the above, it is clear that the proposed development is consistent with the Western Cape Provincial SDF.*

4.2	The Integrated Development Plan of the local municipality.

As extracted from the Planning report (Vreken, 2023):

This Integrated Development Plan (IDP) is the FIFTH GENERATION of strategic plans since the inception of the concept. An IDP is a planning mechanism to synchronise planning and fiscal spending across all spheres of government. The IDP allows for synergy between the efforts of all spheres of government to improve the combined developmental impact of the State, translating national, provincial and district objectives into practical interventions within a defined municipal space.

The Municipal Key Performance Areas (KPA'S) and Strategic Objectives set the strategic tone and pave the direction for future developments, investments and public/private partnership interventions. The Key Performance Areas and Strategic Objectives will inform and guide service delivery and development over the prescribed five years. Key Performance Areas (KPA'S) and Strategic Objectives applicable to the application are listed below:

KEY PERFORMANCE AREA
STRATEGIC OBJECTIVES
SO 1 Create an inclusive, responsive, and healthy environment conducive for living and sustainable growth
SO 2 To manage land -use and development in line with the Spatial Development Framework

According to the IDP the application area is located in WARD 4. The following development needs/priorities are listed for Ward 4:

5.4.1 WARD 4 NEEDS ANALYSIS OUTLINE

DEVELOPMENT NEED / PRIORITY

MOSSEL BAY MUNICIPALITY

- *Resealing of tar roads with bad surface*
- *Storm Water Drainage Infrastructure.*
- *Upgrade Sewerage Network*
- *Play Parks for Children with proper equipment*
- *High mast Lighting Brandwacht*
- *Wi-Fi (Brandwacht Community Hall)*
- *Replace Ageing Water Electricity Infrastructure*
- *Beautification of main town entrances*
- *Relocation of Power Town Community and Rehabilitation of the area*
- *Rehabilitate Klein Brak River Estuary*
- *Implement Recommendations of Klein Brak River Estuary Management Plan*
- *Power generation project*

MBM / AGRICULTURE

- *Community Household Food Gardens*

MBM / HUMAN SETTLEMENT (DHS)

- *Low-Cost Housing Development Brandwacht*
- *Informal Settlement Upgrade (*
- *Rectification of houses in Brandwacht*

MBM / DEDAT / PRIVATE SECTOR / LTO

- *SMME Development*

MBM / CULTURAL AFFAIRS AND SPORT

- *Upgrade existing Library Facilities*

FIGURE 18: EXTRACT FROM THE IDP

Planning Implication

The proposed development is not directly linked to the listed needs/priorities and is not in contradiction with any of the above-mentioned objectives. The subject property is located in Ward 4, and within the urban edge, the proposed application does not have a direct link to the listed needs/priorities set out in for the ward.

4.3.	The Spatial Development Framework of the local municipality.

As extracted from the Planning report (Vreken, 2023):

The SDF strives to align with relevant global, national, provincial and municipal policy and strategic plans, including local strategic plans of the district and neighbouring municipalities; to inform appropriate responses to local spatial development challenges. The majority of the goals set by all tiers of government relate to some aspect of land development, and the spatial manifestation of these developmental solutions, specifically at the local SDF level, must reflect the intent of the government to build an equitable, sustainable, and enabling South Africa.

MOSSEL BAY SDF
VISION
We strive to be a trend-setting, dynamic Municipality delivering quality services responsive to the demands and challenges of the community and our constitutional mandate, in which all stakeholders can participate in harmony and dignity.
MISSION
❖ To render cost-effective and sustainable services to the entire community with diligence and empathy. ❖ To create mutual trust and understanding between the municipality and the community. ❖ To have a motivated and representative municipal workforce with high ethical standards, which is empowered to render optimal services to the community. ❖ The community is our inspiration and our workforce is our strength in the quest for community development and service delivery.

According to the Mossel Bay Municipality Spatial Development Framework (SDF), the application area is located inside the urban edge of Mossel Bay and the existing approved development rights are acknowledged. The SDF elaborates that no further urban development should be encouraged other than the new development areas identified in the SDF.

FIGURE 17: EXTRACT - HARTENBOS STRUCTURE PLAN

Planning Implication

It is clear that the Application Area and the surrounding area are earmarked for urban expansion. The subject property is located within the urban edge and existing urban footprint of Mossel Bay. The proposed development will improve the network coverage of the existing and future residential developments of the surrounding area.

4.4.	The Environmental Management Framework applicable to the area.

The proposal is in line with the Mossel Bay Environmental Management Framework (May 2022):

- **The proposal has been assessed and supported by a specialist**
- **The area has been earmarked for urban expansion, the proposal provides network coverage to the approved urban expansion area**

Hartenbos north status proposals

- **The necessary environmental authorisation is being applied for**
- **A planning application is being made**

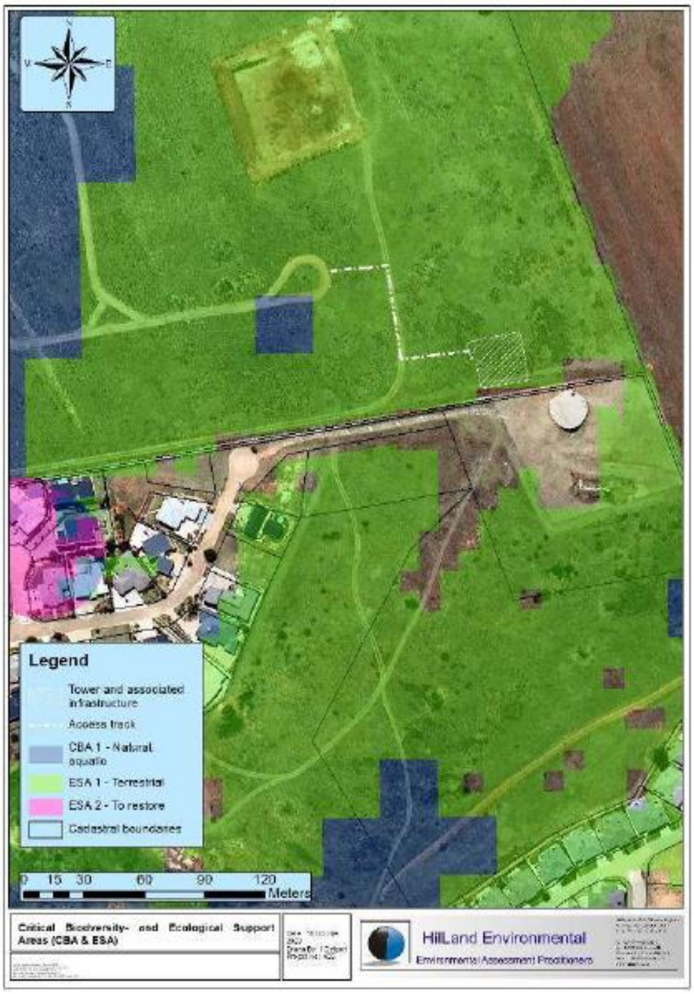
Mossel Bay Planning have indicated that the motivation for the tower as a high site for safety and security community concerns will inform the decision in terms of the policy in relation to the visual impact of high sites.

5.	Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.

The biodiversity specialist confirmed that the area proposed for the tower is suitable and there will be no significant loss or impact on biodiversity.

6.	Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.

The Western Cape Biodiversity Spatial Plan (WCBSP, 2017) maps the proposed footprint area as falling within a terrestrial Ecological Support Area (ESA 1).



ESA 1 is defined as follows:

Maintain in a functional, near-natural state. Some habitat loss is acceptable, provided the underlying biodiversity objectives and ecological functioning are not compromised.

Based on the WCBSP, the proposal is restricted in ESA 1 –

As extracted from the handbook:

7. b) Other utilities
Includes: Waste water treatment works, water purification plants, reservoirs, dams, communication base stations, power stations, renewable energy facilities.

Assumes the following conditions for both categories:

- Installations to be located on transformed, disturbed or low-value agricultural land, where possible. **– compliant – the site has been assessed by the specialist that confirmed that it is transformed.**

- Infrastructure installations requiring a location outside the urban edge is restricted to extensive agricultural areas peripheral to settlements in close proximity to regional routes to facilitate access and restrict fragmentation of the agricultural landscape. – **Compliant – the proposal is within the urban edge and area of Mossel Bay**

- Installations in intensive agricultural areas are restricted to essential services (e.g. irrigation infrastructure, safety and security).**- the property is no longer zoned for agriculture**
- Energy generating developments (i.e. nuclear power, wind farms, etc.) are associated with large areas of land left undeveloped thereby maintaining low transformation levels relative to the property size. **N/A**

- Avoidance of sensitive areas such as flood lines, river and wetland buffers and special habitats. **– compliant – no impact as confirmed by the specialist**

- All water-use developments should be subject to the Ecological Reserve in terms of the National Water Act. **– compliant – no impact**

The proposal is therefore in line with the recommendations of developments such as a cell tower within an ESA	
7.	Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.
N/A	
8.	Explain whether the screening report has changed from the one submitted together with the application form. The screening report must be attached as Appendix I.
No change	
9.	Explain how the proposed development will optimise vacant land available within an urban area.
The mast site is located adjacent to residential areas and falls within the urban edge of Hartenbos and on land that is already transformed as confirmed by the specialist	
10.	Explain how the proposed development will optimise the use of existing resources and infrastructure.
• **Connection to existing electrical supply for the estate** • **Use of existing internal access roads**	
11.	Explain whether the necessary services are available and whether the local authority has confirmed sufficient, spare, unallocated service capacity. (Confirmation of all services must be included in Appendix E16).
Municipal connection to be confirmed as part of the planning application.	
12.	In addition to the above, explain the need and desirability of the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013) or the DEA's Integrated Environmental Management Guideline on Need and Desirability. This may be attached to this BAR as Appendix K.

AS EXTRACTED FROM THE PLANNING REPORT (VREKEN, 2024):

Need

Need, as defined by DEADP refers to the timing of the proposal, as such the question 'do we need this development now?'. In answering this question, the planning and land use policy of the area must be examined. Therefore, consistency with the existing approved Spatial Development Framework (SDF), the current Integrated Development Plan (IDP) and other municipal planning policies are important in the consideration of need.

Further considerations of need include the need of the community/area of the activity & land use – is the development "a societal priority". The need for a project also relates to the service's capacity and consistency with infrastructure planning. Radio spectrum is used to carry information wirelessly for a vast number of everyday services ranging from television and radio broadcasting, mobile phones and Wi-Fi to communications systems for emergency services, baby monitors, GPS and radar.

So many vital services are completely reliant on the spectrum that it form an indispensable part of all of our lives and one that is often taken for granted. Yet in a world that demands ever-increasing amounts of information, faster communications and higher definition media, it is important to be aware that the useable radio spectrum is a scarce resource where rapidly growing demand exceeds supply.

The key ingredient for faster wireless services that can support the rising tide of data is more spectrum. However, it is a finite resource that is already heavily encumbered. This makes spectrum management a vital job for the government. When the spectrum is made available in a fair and reasonable manner to the services that will make the best use of it, the social and economic benefits are profound.

According to the current Mossel Bay SDF, the development area is inside the demarcated urban edge and is therefore suitable for urban development. The location of the proposed telecommunication mast is site-specific to provide network coverage to the existing residential areas and future (phased) developments of Outeniquasbosch Life Style Estate and the surrounding area

The proposed development is in line with all the provincial, district and local development policies. The development of the telecommunication mast will cater to the needs of the community and it will contribute to the effective provision of network services for the surrounding area.

"As technology advances, there is a greater need/demand for Cell Towers due to the limited range each tower/operator can cover from that tower. Planning best practice is using a Radius of 0.8km - 1km for ideal coverage scenarios. This inadvertently steers us to a high demand for more Cell Towers as technology advances to reach mobile coverage satiation. The nearest existing Tower is located 1.9km South West of the Planned Tower and provides sparse 2G and 2.5G and 3G coverage with numerous dropped calls and intermittent data access. It should be noted that the existing Tower is situated at an elevation of 54m above Sea Level compared to the planned site located at 143m above Sea Level. The existing Tower is unable to provide the required Coverage and penetration due to the distance as well as Elevation. The next closest existing tower is 2.7km South East and is too far away to make any contribution to the coverage or penetration" (Vreken, 2023)

FIGURE 19: DISTANCE OF NEAREST EXISTING CELL TOWER

It will be to the benefit of many role-players if the proposed freestanding telecommunication base station is allowed. The primary benefit is the improved network connectivity for the people residing within the surrounding residential areas and the future Outeniquasbosch Phases 8, 9, 10, 11, 12,13,14 (285 households), as well as Monte Christo, and even portions of Hartland. This leads to better communication, allowing people to stay connected with family and friends, access educational resources, and participate in the digital economy. It is therefore the considered opinion that the timing is correct for this development proposal.

Outeniquasbosch Wildlife Village and numerous of its residents provided written consent that they are in support of the proposed Cell Tower (refer to **ANNEXURE G** & **ANNEXURE H, see planning report**)

Desirability

The desirability of a proposed activity also relies heavily on consistency with policy documentation but has a distinctly spatial focus. The guideline on Need and Desirability specifically poses the question "*Would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF as agreed to by the relevant authorities?*"

NEMA also links the desirability of development to the concept of the "best practicable environmental option"; this refers to the option that provides the most benefit and causes the least damage to the environment, at a cost acceptable to society, in the long term as well as in the short term. The consideration of alternatives is therefore closely related to this concept.

The proposal is in line with the applicable policy documentation (Western Cape Provincial SDF, SC RSIF, Mossel Bay SDF and the Mossel Bay IDP), meaning that it is in line with the spatial proposal and vision for the area whilst complying with the development guidelines for the current proposal. Therefore, the approval of this application would not compromise the integrity of the applicable policy documents agreed to by the relevant authorities.

Given the existing residential character of the area, it is the considered opinion that the proposed telecommunication mast will not impact the existing land use rights of any property owners in the area. The proposal will not prevent any surrounding owner from exercising their legal land use rights, in fact, the proposal will rather enhance the functionality of the area, through the provision of a telecommunication mast and increase connectivity.

The proposed development will have a positive socio-economic impact on the area. The application area is situated within an existing urban footprint, surrounded by residential and agricultural uses. The site is zoned 'Open Space Zone II' which allows a freestanding base telecommunication station as a consent use. The proposed development will contribute to the provision of network coverage in the area for current and future residential developments. Thus, increasing the prosperity and standard of living in the town as a whole.

It can, therefore, be concluded that the proposal is regarded as desirable.

Planning Evaluation

The above boxes for need and desirability can be ticked. The proposal will have an insignificant impact as it is in line with all planning legislation and consistent with the applicable spatial planning policies.

It is clear that the proposal is in line with the applicable spatial planning policies, will not prevent any surrounding landowner from lawfully exercising their existing land use rights or detract from the character of the area and can, therefore, be considered to be desirable and suitable for the area that it is to be situated in" (Vreken, 2023).

As per the BodyCorp report (2024):

Demand for Mobile Coverage.

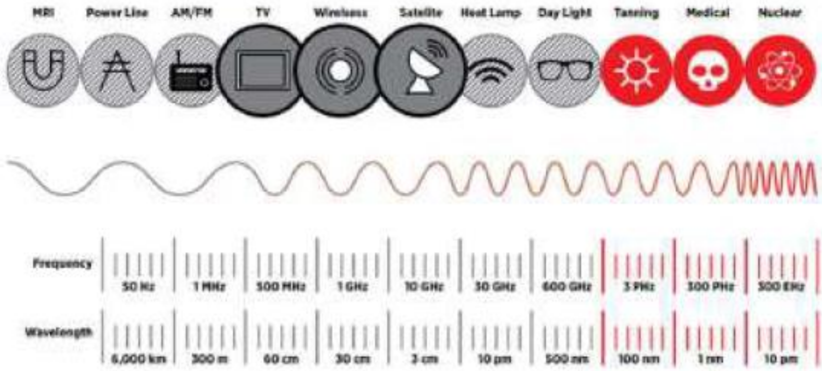
According to a report issued by GSMA, https://www.gsma.com/spectrum/wp-content/uploads/2017/04/Introducing- Radio-Spectrum.pdf

Radio spectrum is used to carry information wirelessly for a vast number of everyday services ranging from television and radio broadcasting, mobile phones and Wi-Fi to communications systems for the emergency services,baby monitors, GPS and radar.

So many vital services are completely reliant on spectrum that it forms an indispensable part of all of our lives and one that is often taken for granted. Yet in a world which demands ever increasing amounts of information, faster communications and higher definition media, it is important to be aware that useable radio spectrum is a scarce resource where rapidly growing demand exceeds supply.

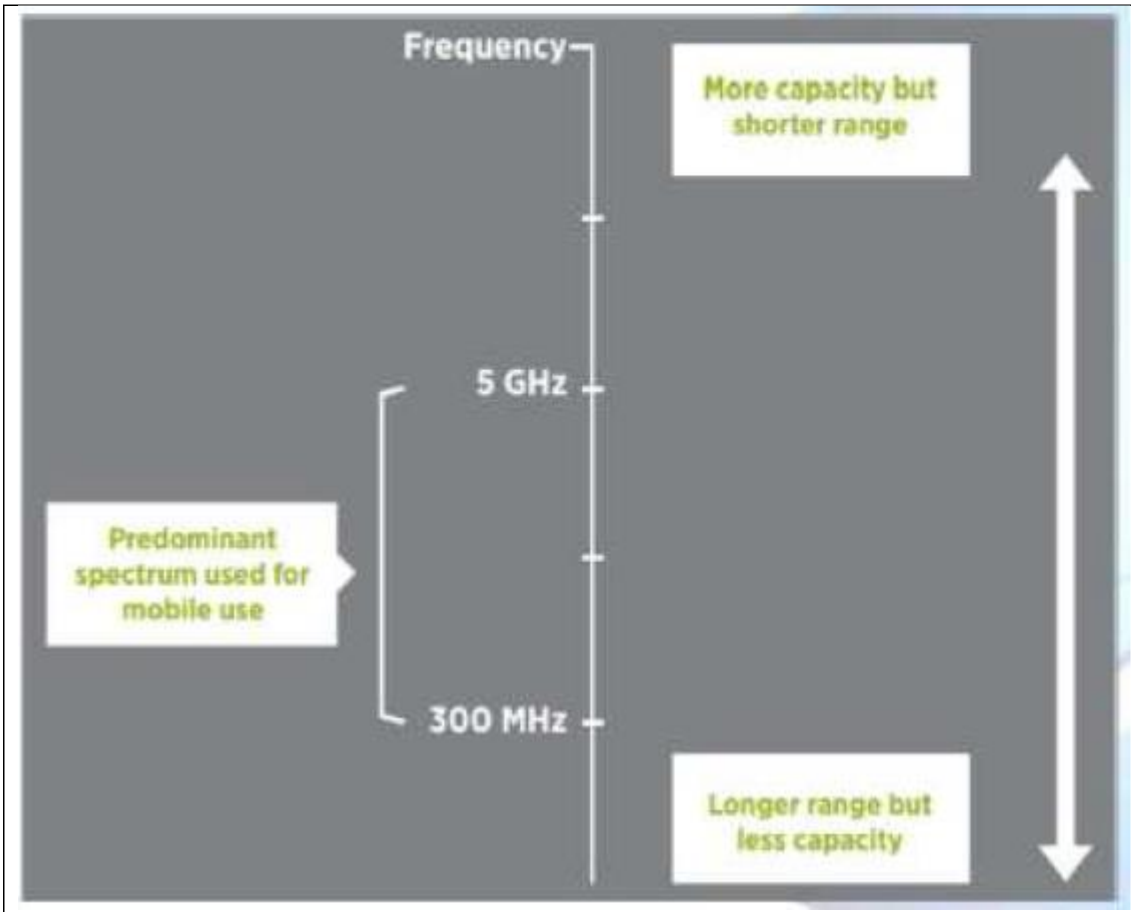
The key ingredient for faster wireless services that can support the rising tide of data is more spectrum. However, it is a finite resource that is already heavily encumbered. This makes spectrum management a vital job for government. When spectrum is made available in a fair and reasonable manner to the services that will make the best use of it, the social and economic benefits are profound.

Radio waves constitute just one portion of the entire electromagnetic spectrum, which also includes a variety of other waves including X-ray waves, infrared waves and light waves.



Development Growth.

The correlation between the Various Frequencies are disproportionate meaning the higher the Frequency the shorter the range for Mobile Coverage as illustrated below:



As technology advances, there is a greater need/demand for Celltowers due to the limited range each tower/operator can cover from that tower. Planning best practice is using a Radius of 0.8km - 1km for ideal coverage scenarios.

This inadvertently steers us to a high demand for more Celltowers as technology advances to reach mobile coverage satiation.

Proximity of Existing Towers
The Closest Existing Tower is located 1.9kms South West of the Planned Tower and provides sparse 2G and 2.5G and 3Gcoverage with numerous dropped calls and intermittent data access.

It should be noted that the Existing Tower is situated an elevation of 54m above Sea Level compared to the planned site located at 143m above Sea Level. The existing Tower is unable to provide the required Coverage and penetration due to the distance as well as Elevation.

The next closest existing tower is 2.7kms South East and is too far away to make any contribution to the coverage or penetration.

While the demand for fibre connectivity increases, the need for Line-of-Sight(LOS) communications remain high as many services rely on linking Installations via microwave communication links while fibre is being deployed in the various zones/regions. each mobile network operator makes use of their own fibre systems or alternatively those of their partners hence the need for microwave communication links (BodyCorp, 2024).

The site selected has been assessed by a biodiversity specialist and it has been confirmed that no sensitive habitat/vegetation will be affected by the proposal. The site is heavily transformed.

The Municipality confirmed the following in their comment on the application : *It is clear from the abovementioned that a 30 m mast must be considered carefully and only permitted in exceptional circumstances. The Mossel Bay Municipality has initiated several initiatives to enhance safety and security in the larger Mossel Bay area. A substantial investment in the Mossel Bay Joint Operational Centre (JOC) has been implemented. The centre is fully operational with several crucial disciplines like SAPS, Fire Protection, Disaster Management, Traffic, Environmental unit and other departments operating out of the JOC to enable timeous an efficient reaction to any applicable situation. The JOC does rely on several "high sites" for communication purposes and several meeting has be held to discuss areas where new "high sites" out of the norm must be established to serve as main communication infrastructure used by several disciplines. The subject mast was identified as such crucial infrastructure which will not only benefit the owner of the mast and surrounding community but also the larger community.*

Spatially the 30m mast is supported due to the exceptional circumstances and need for a line-of-sight communication "high site" in the area. This does not in any way provide an indication that the proposal will be approved by the Municipality but acknowledge the exceptional circumstances surrounding the proposal. " J Roux, 2024

SECTION F: PUBLIC PARTICIPATION

The Public Participation Process ("PPP") must fulfil the requirements as outlined in the NEMA EIA Regulations and must be attached as Appendix F. Please note that If the NEM: WA and/or the NEM: AQA is applicable to the proposed development, an advertisement must be placed in at least two newspapers.

1. Exclusively for linear activities: Indicate what PPP was agreed to by the competent authority. Include proof of this agreement in Appendix E22.

N/A

2. Confirm that the PPP as indicated in the application form has been complied with. All the PPP must be included in Appendix F.

Placement of advert in Mossel Bay Advertiser	**31 May 2024**
Placement of site notice on site	**31 May 2024**
Notification of neighbouring landowners	**3 June 2024**
Notification of the relevant Organs of State, State Departments	**3 June 2024**

Advert indicated availability of the Draft BAR for the period 3 June to 4 July 2024 – see PPP report appendix F

3. Confirm which of the State Departments and Organs of State indicated in the Notice of Intent/application form were consulted with.

DEADP George Office	**DEADP-EIAAdmin George <DEADPEIAAdmin.George@westerncape.gov.za>**
Department of Health	**'Nathan Jacobs' <Nathan.Jacobs@westerncape.gov.za>**
Mossel Bay Municipality	**'Minnie, Rudi' <rminnie@mosselbay.gov.za>**
Mossel Bay Ward Councillor – ward 4 **Clr Annatjie Janse van Rensburg - Councillor**	**anna.jansevanrensburg@mosselbay.gov.za**
Garden Route District Municipality	**'nina@gardenroute.gov.za'**
CapeNature	**CapeNature (msimons@capenature.co.za)**
BOCMA	**'Andiswa Sam' <asam@bocma.co.za>**
Dept Agriculture	**'Van der Walt, Cor' CorvdW@elsenburg.com**
SACAA	**'strohl@caa.co.za'**

4. If any of the State Departments and Organs of State were not consulted, indicate which and why.

Department of Forestry – no protected trees present

5. if any of the State Departments and Organs of State did not respond, indicate which.

Department of Agriculture

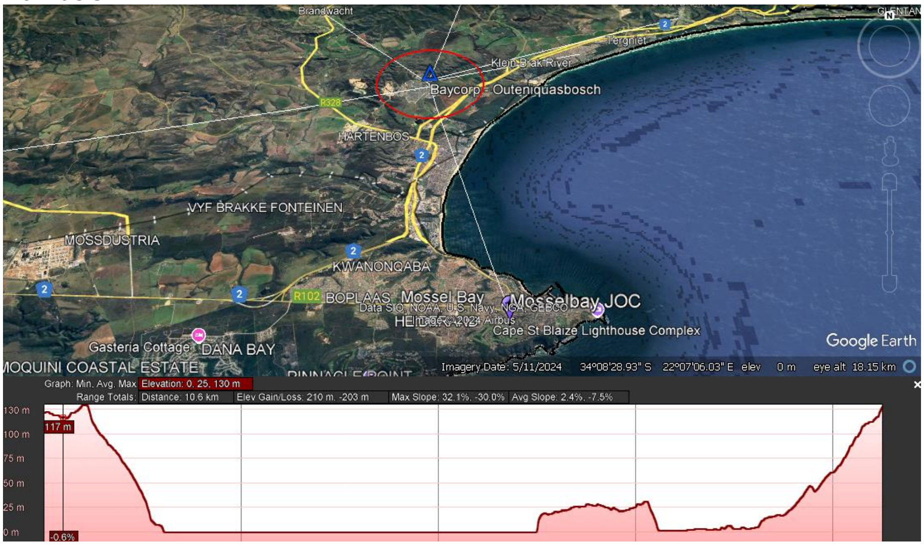
Department of Health

6. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated into the development proposal.

- **Various I&APs indicated that there is a need for additional connection, which is currently lacking in the area**
- **Concerns raised by I&APs and how it was addressed:**
    - **Disruption of flora and fauna:** this was addressed by highlighting that the proposed area set out for the tower is marginal in comparison to the remainder of open space forming part of Outeniquasbosch that will be conserved. The associated impacts were assessed by a SACNASP specialist (report attached to appendix G)
    - **Security risk:** access to the site will be through Outeniquasbosch security, there is no alternative access to the site and no external security risk
    - **Visual impact of the tower**: these concerns were already addressed in the VIA and associated recommended mitigation measures
    - **Option of constructing a 15m tower rather than 30m:** this was already considered in the Draft BAR. In order to obtain the necessary coverage various 15m towers will need to be constructed which will have a larger visual and ecological impact. As such this alternative was rejected.
    - **Impact on health:** an additional study was done which indicates that the tower is well within the prescribed national limits.
    - **Alternative placements:** various alternative sites were considered in the draft BAR. The proposed position is the best suited, see diagrams below from BodyCorp:

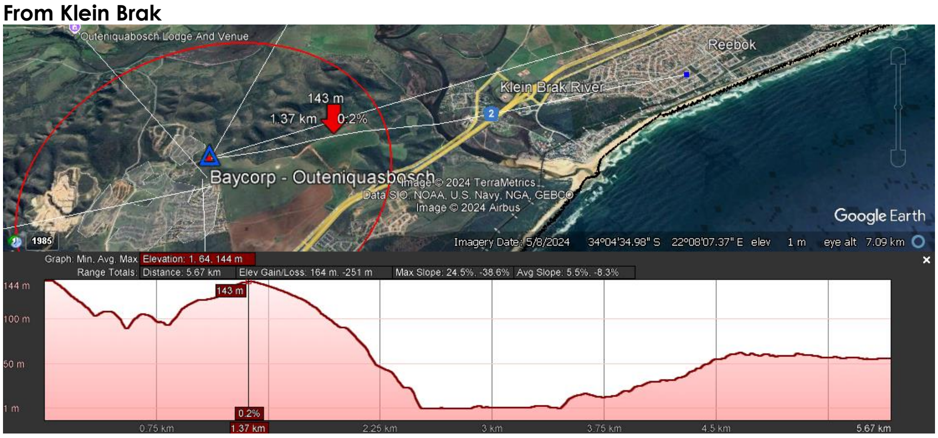
The Illustrations used below is an indication of the line-of-Sight variations from various vantage points towards the Outeniquasbosch Celltower and the Ground Elevation along that path will illustrate that in some instances the 30m is too low.

<u>**Elevation profile Route to Outeniquasbosch**</u>
From JOC



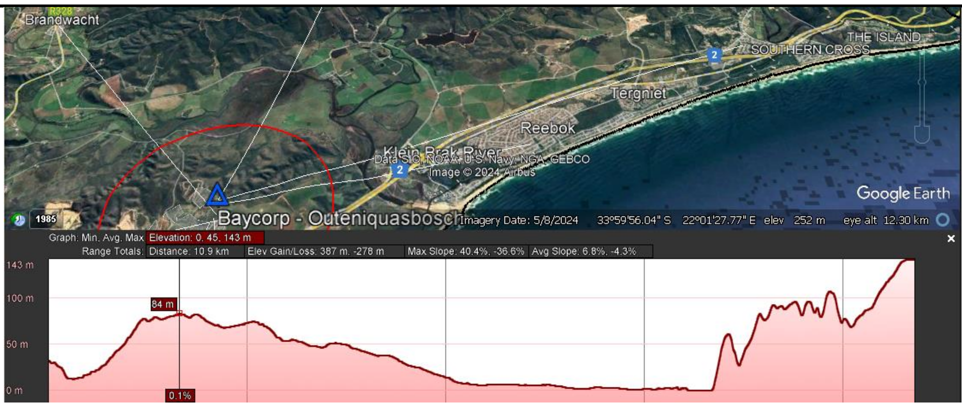
It is evident that a ground variance of approximately 16m-17m dipping just over the crest which necessitates a tower taller than the Municipal Bylaws.

From Klein Brak



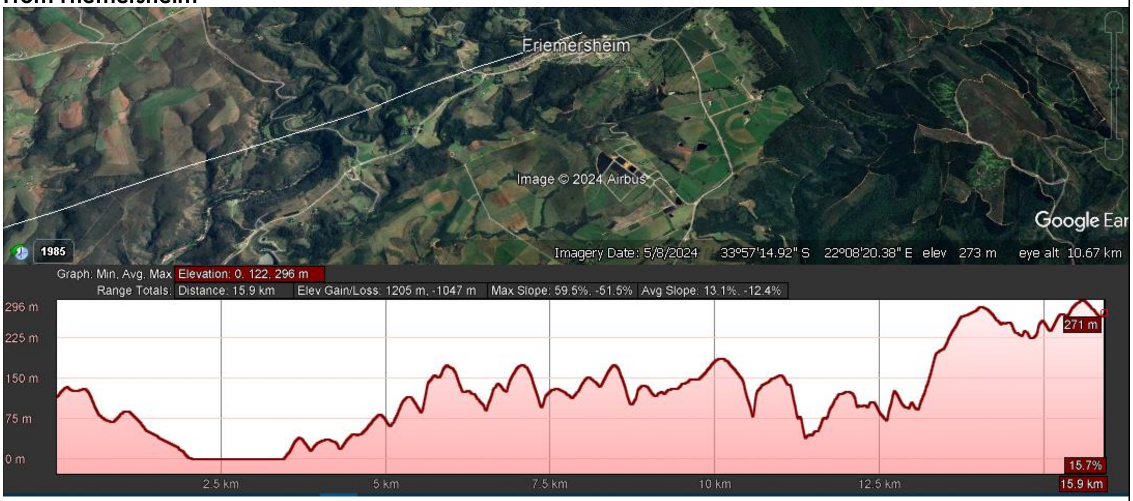
The 30m heigh would be sufficient

From Groot Brak



The 30m Tower will be sufficient to provide Line of Sight to that location or alternatively to be used as a link in a daisy-chain Microwave solution

From Friemersheim



Line of sight will be challenging but is possible to find a perfect location to obtain LOS.

<u>While there are multiple vantage points to investigate , it is evident that a 30m tower will be well suited to the Mosselbay Community due to its placement.</u>

The Municipality confirmed the following in their comment on the application : *It is clear from the abovementioned that a 30 m mast must be considered carefully and only permitted in exceptional circumstances. The Mossel Bay Municipality has initiated several initiatives to enhance safety and security in the larger Mossel Bay area. A substantial investment in the Mossel Bay Joint Operational Centre (JOC) has been implemented. The centre is fully operational with several crucial disciplines like SAPS, Fire Protection, Disaster Management, Traffic, Environmental unit and other departments operating out of the JOC to enable timeous an efficient reaction to any applicable situation. The JOC does rely on several "high sites" for communication purposes and several meeting has be held to discuss areas where new "high sites" out of the norm must be established to serve as main communication infrastructure used by several disciplines. The subject mast was identified as such crucial infrastructure which will not only benefit the owner of the mast and surrounding community but also the larger community.*

Spatially the 30m mast is supported due to the exceptional circumstances and need for a line-of-sight communication "high site" in the area. This does not in any way provide an indication that the proposal will be approved by the Municipality but acknowledge the exceptional circumstances surrounding the proposal. " J Roux, 2024

Note:

A register of all the I&AP's notified, including the Organs of State, <u>and</u> all the registered I&APs must be included in Appendix F. The register must be maintained and made available to any person requesting access to the register in writing.

The EAP must notify I&AP's that all information submitted by I&AP's becomes public information.

Your attention is drawn to Regulation 40 (3) of the NEMA EIA Regulations which states that *"Potential or registered interested and affected parties, including the competent authority, may be provided with an opportunity to comment on reports and plans contemplated in subregulation (1) prior to submission of an application but **must** be provided with an opportunity to comment on such reports once an application has been submitted to the competent authority."*

All the comments received from I&APs on the pre -application BAR (if applicable and the draft BAR must be recorded, responded to and included in the Comments and Responses Report and must be included in Appendix F.

All information obtained during the PPP (the minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded) and must be included in Appendix F.

Please note that proof of the PPP conducted must be included in Appendix F. In terms of the required "proof" the following is required:

- a site map showing where the site notice was displayed, dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;
- in terms of the written notices given, a copy of the written notice sent, as well as:
  - if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);
  - if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp indicating that the letter was sent);
  - if a facsimile was sent, a copy of the facsimile Report;
  - if an electronic mail was sent, a copy of the electronic mail sent; and
  - if a "mail drop" was done, a signed register of "mail drops" received (showing the name of the person the notice was handed to, the address of the person, the date, and the signature of the person); and
- a copy of the newspaper advertisement ("newspaper clipping") that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT

All specialist studies must be attached as Appendix G.

1. Groundwater

1.1.	Was a specialist study conducted?	YES	NO
1.2.	Provide the name and or company who conducted the specialist study.		
Not required – the activity does not impact on ground water in any way.			
1.3.	Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.		
N/A			
1.4.	Indicate the depth of groundwater and explain how the depth of groundwater and type of aquifer (if present) has influenced your proposed development.		
N/A			

2. Surface water

2.1.	Was a specialist study conducted?	YES	NO
2.2.	Provide the name and/or company who conducted the specialist study.		
David Hoare – David Hoare Consulting			
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.		
The NFEPA mapping indicates that the site is located more than 32m from non-perennial watercourses, but within 500m from a wetland. **The specialist however confirmed; "No aquatic systems were found to be present on site, nor would the activity impact on any adjacent aquatic systems". This was confirmed by BOCMA that no GA/WULA will be required.**			

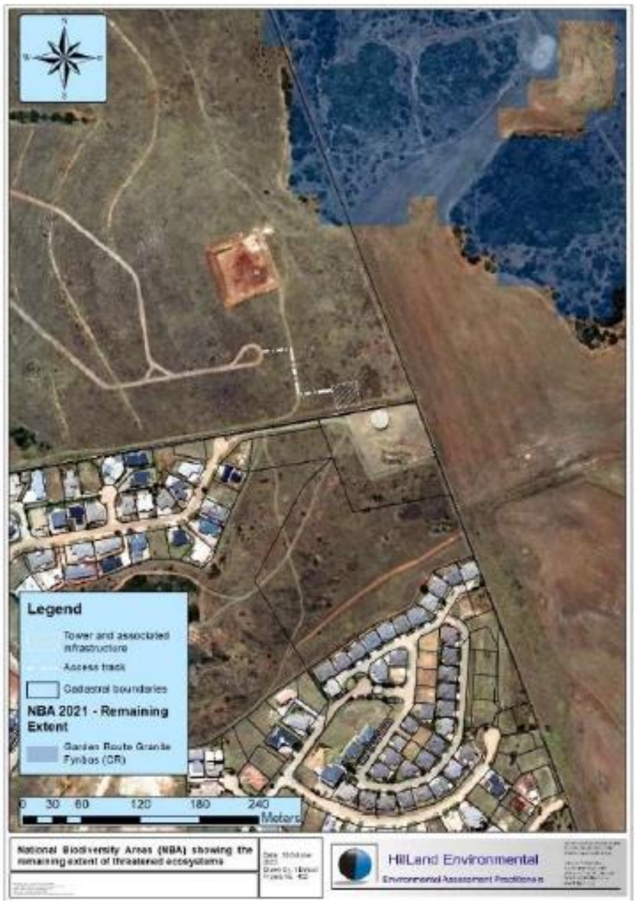
3. Coastal Environment

3.1.	Was a specialist study conducted?	YES	NO
3.2.	Provide the name and/or company who conducted the specialist study.		
N/A			
3.3.	Explain how the relevant considerations of Section 63 of the ICMA were taken into account and explain how this influenced your proposed development.		
N/A			
3.4.	Explain how estuary management plans (if applicable) has influenced the proposed development.		
N/A			
3.5.	Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones, have influenced the proposed development.		
N/A			

4. Biodiversity

4.1.	Were specialist studies conducted?	YES	NO
4.2.	Provide the name and/or company who conducted the specialist studies.		
David Hoare – David Hoare Consulting			
4.3.	Explain which systematic conservation planning and other biodiversity informants such as vegetation maps, NFEPA, NSBA etc. have been used and how has this influenced your proposed development.		

The National Biodiversity Areas (NBA) mapping showing the original extent of threatened ecosystems, map the footprint area as falling within an area mapped as critically endangered Mossel Bay Shale Renosterveld. Based on the remaining extent data, the area is correctly mapped as not supporting any remaining vegetation from this ecosystem type.



The Western Cape Biodiversity Spatial Plan (WCBSP, 2017) maps the proposed footprint area is being located within a terrestrial Ecological Support Area (ESA 1).

The NFEPA mapping shows that there are no watercourses mapped within the site / within 32m from the site. A natural wetland area has been mapped east of the property, but will not be affected by the proposal.

Based on these sensitives mapping, a specialist was appointed to assess the proposal. The specialist confirmed: In conclusion, there is no aquatic system on the site, and the small area of remaining vegetation on site is within an historically cultivated area and is therefore secondary. It is on the margin of an area in which all vegetation has been lost and is therefore subject to a high disturbance regime. It is dominated by common and weedy species, and the overall plant diversity is low. It is ecologically in very poor condition. If any of this vegetation is affected by the construction of the proposed mast, it is not considered to be significant

4.4.	Explain how the objectives and management guidelines of the Biodiversity Spatial Plan have been used and how has this influenced your proposed development.

ESA 1 objective and guideline:

ESA: Endangered Ecosystem	Maintain in a functional, near-natural state. Some habitat loss is acceptable, provided the underlying biodiversity objectives and ecological functioning are not compromised.	• Ideally these areas should be avoided for any activity resulting in habitat loss. If they cannot be avoided it must be shown that the mitigation hierarchy has been applied.

The proposal has been assessed by the specialist confirming that the site selected for the proposal is transformed and will not result in the loss of any natural habitat. The ecological functioning will therefore not be compromised.

4.5.	Explain what impact the proposed development will have on the site specific features and/or function of the Biodiversity Spatial Plan category and how has this influenced the proposed development.

Specific species noted by the specialist:

"This vegetation is dominated primarily by the dwarf shrub, *Oedera genistifolia* (Klein perdekaroo), an abundant and common species in the southwestern cape, South Africa (occurring from Namaqualand to Grahamstown). It is usually found on lower north-facing slopes, especially on rocky clay and shale-based soils, and is a common component of the vegetation on old lands in the area around Mossel Bay. It is accompanied by other dwarf shrubs, including *Eriocephalus africanus, Helichrysum patulum, Nidorella ivifolia, Selago dolosa,* and *Solanum linnaeanum*, and the shrub, *Searsia pallens*. Between the dwarf shrubs is a weedy herb layer that includes three grasses typical of disturbed areas, namely *Cynodon dactylon*, *Paspalum dilatatum*, and *Sporobolus africanus*, as well as the spreading succulent, *Carpobrotus edulis*, and several weeds and weedy species, including *Abutilon sonneratianum*, *Berkheya heterophylla, Bulbine frutescens, Cirsium vulgare* (declared weed), *Commelina africana*, *Cyperus usitatus*, and *Erigeron bonariensis* (exotic). There are three small herbs that were found on site, *Indigofera priorii, Monopsis unidentata*, and *Oxalis ciliaris*, all of which are common and widespread species in the Western Cape (and beyond). With the addition of one more species (discussed below) this is the entire flora of the assessed area (22 plant species).

The low shrub, *Hermannia lavandulifolia*, listed as Vulnerable, occurs within the general area in low numbers on disturbed sites. One plant was seen within the development footprint. Observations (personal as well as iNaturalist) of this species at various sites in the general Mossel Bay area (including Hartenbos) indicate that it is a common and relatively weedy species that prefers habitat that is burnt, mowed, or otherwise cleared (including previous soil disturbance). The status of this species is currently being re-assessed and it is likely to be listed as Least Concern (SANBI, personal communication). Based on the possible re-assessment of this species, and its abundance, it is not treated here as a species of concern. The site therefore has LOW sensitivity with respect to the Plant Species Theme. No other plant species flagged for this site are likely to occur within such disturbed habitat" (Haore, 2024)

4.6.	If your proposed development is located in a protected area, explain how the proposed development is in line with the protected area management plan.

N/A – not located in a protected area

4.7.	Explain how the presence of fauna on and adjacent to the proposed development has influenced your proposed development.

None of the sensitive species listed by the screening tool report have been noted by the specialist on site and /or are likely to occur on site or in the adjacent areas.

The estate is a wildlife estate with various introduced species roaming, there are sufficient open space areas available for these introduced animals on the estate and the loss of this small area for a mast will not affect fauna.

5. Geographical Aspects

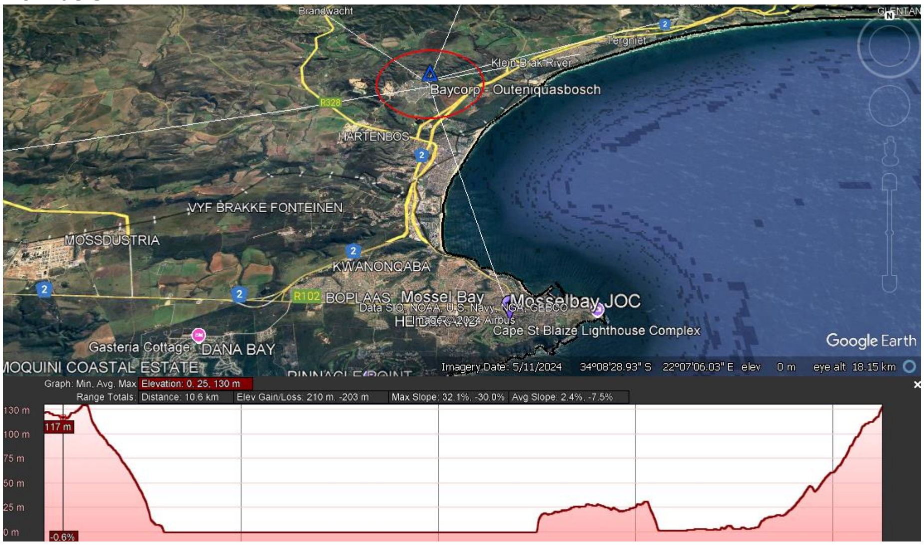
Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.

Position of the tower –
The tower will be located as close to the apex of the hill which is the ideal location to provide mobile communications coverage as well as high site options for microwave transmission.

As per Baycorp:
The Illustrations used below is an indication of the line of Sight variations from various vantage points towards the Outeniquasbosch Celltower and the Ground Elevation along that path will illustrate that in some instances the 30m is too low.

Elevation profile Route to Outeniquasbosch

From JOC



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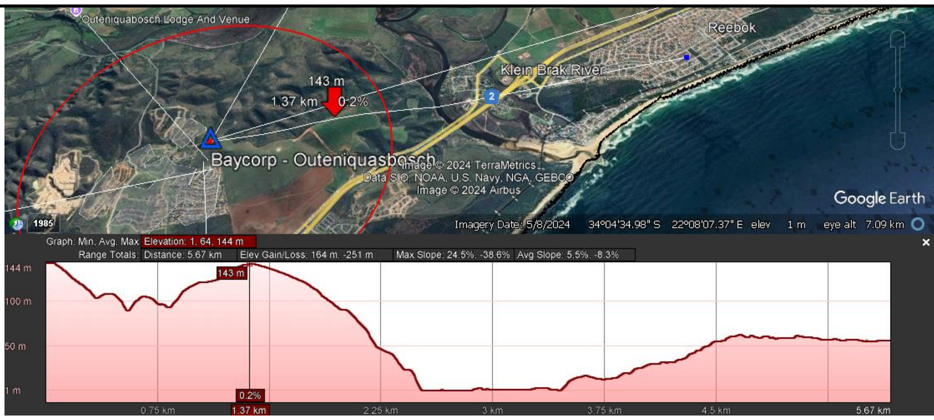

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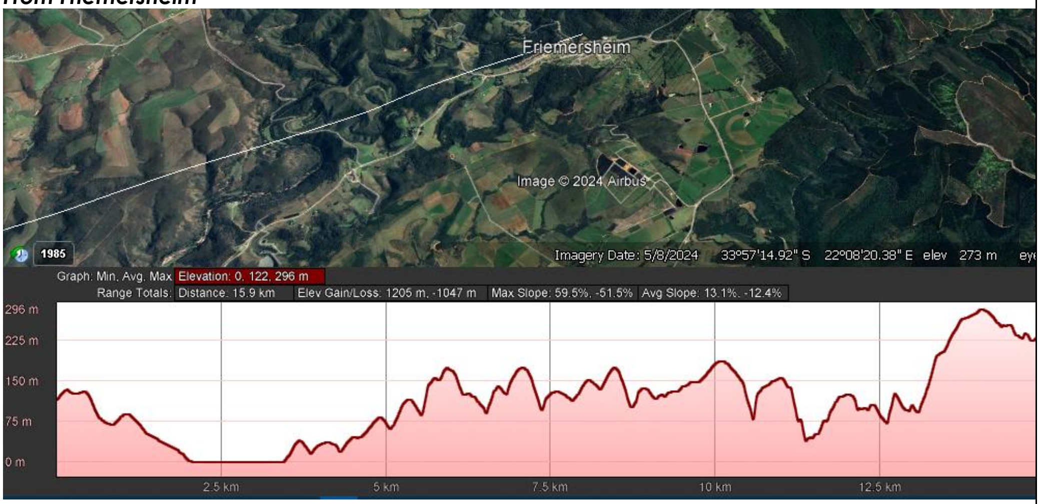


Line of sight will be challenging but is possible to find a perfect location to obtain LOS.

While there are multiple vantage points to investigate , it is evident that a 30m tower will be well suited to the Mosselbay Community due to its placement

Visual impact of the tower –
As per the visual impact assessment (VRM, 2024):

Locational mitigation variations evaluated, using the ridgeline for topographic screening to southern receptors, found that the tower located is optimal.

- *Although the tower is located on a prominent ridgeline that does have a wide-area viewshed, the ridgeline analysis found that the tower is centrally located along the 6km ridgeline, with the cell tower not located on 'peak' point, and not near the main hill-top 'peak' feature that is the main visual focal point.*
- *While another lattice type tower does exist on the ridgeline, the tower is located 3.4 km to the west of the proposed tower, and the two towers are unlikely to be viewed within the same viewscape as seen from the N2 Highway receptors (eastbound). The other tower is larger than the proposed and is located 4.4km away from the N2 Highway/ Hartenbos urban context and appears relatively small in the landscape.*
- *The existing water reservoir and smaller cell tower structure as well as the build nature of the Monte Christo Estate,*

increases the visual absorption capacity of the area.

- *The photomontages generated from the N2 Highway/ Hartenbos urban areas suggests that the grey colour, lattice type tower would not generate High or Very High levels of visual intrusion.*
- *While this 30m mast could set a precedent against the 15m height requirement of the 2021 By-Laws that could result in increased landscape degradation from taller, visually intrusive masts and towers, this risk is reduced as any telecommunication mast would be subject to environmental assessment and would need to be judged on a site by site basis.*

For these reasons, it is the recommendation of this assessment that the tower should be authorised with mitigation as follows: No uplighting of the tower.

No branding on the tower.

The tower should be painted a mid-grey colour.

Figure showing typical lattice towers – the mitigated colour grey is shown in the specialist renderings below

The base structures should be painted a mid-grey colour and located to the north-west of the tower where the existing mounding of the reservoir would provide more visual screening.

Visual assessment findings:

SCENIC QUALITY **Medium**

The scenic quality of the proposed development site is rated Medium. While the undulating ridgeline that is created by the low hill does have visual appeal, the built nature of the adjacent Monte Christo Estate does detract from this as a natural landscape. There is already a larger sized man-made modification with the reservoir construction, as well as a smaller cell mast.

RECEPTOR SENSITIVITY TO LANDSCAPE CHANGE **Medium to Low**

Receptor sensitivity to landscape changes is expected to be Medium to Low. This is due to the higher VAC levels of the locality, the suitable location of the tower that is not on a 'peak' point of the ridgeline, and not on the main 'peak' focal point. The majority of the receptors making use of the views to the north that would include the tower within the vista, are located some distance from the tower and have Medium to Low Visual Exposure, as well as existing views of the Monte Christo development context.

Figure 10. Photomontage of the main view towards the proposed cell tower as seen from Hartenbos/ N2 Highway Eastbound.

Figure 11. Zoomed in view of the photomontage of the main view towards the proposed cell tower as seen from Hartenbos/ N2 Highway Eastbound.

6. Heritage Resources

6.1.	Was a specialist study conducted?	YES	NO
6.2.	Provide the name and/or company who conducted the specialist study.		
Not required as confirmed HWC			
6.3.	Explain how areas that contain sensitive heritage resources have influenced the proposed development.		
N/A			

7. Historical and Cultural Aspects

Explain whether there are any culturally or historically significant elements as defined in Section 2 of the NHRA that will be affected and how has this influenced the proposed development.
No culturally or historically significant elements will be affected by the proposal. **As confirmed by the visual specialist; "In terms of international best practice, the proposed landscape modification will not trigger any issues as there are no significant cultural/ landscape visual resources found on the site or immediate surrounds that are flagged by international landscape guidelines" (VRM, 2024).**

8. Socio/Economic Aspects

8.1.	Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.
The proposed tower will be situated within a residential estate within the urban edge and area of Hartenbos. Surrounding properties are characterised by a variety of residential developments, agricultural land, tourist accommodation and tourist facilities.	
8.2.	Explain the socio-economic value/contribution of the proposed development.
The proposed tower will have a positive impact on the surrounding residential area through provision of additional network coverage to cater for the existing and future residential development / expansion in the area (this was co. The need to improved cell phone coverage has been highlighted by residents in the area and is especially required by adjacent medical facilities in Monte Christo.	
8.3.	Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.
Improvement of cell phone coverage for the area in general and the medical facilities in particular. The proposal will only result in limited job opportunities during construction to a specialist contractor.	
8.4.	Explain whether the proposed development will impact on people's health and well-being (e.g. in terms of noise, odours, visual character and sense of place etc) and how has this influenced the proposed development.

The construction phase will result in minimal site-specific noise impacts. The operational phase will not result in any noise impacts.

- **The proposal will not result in any odour impacts**
- **The health impacts of cell towers are covered by the standard set for all communications structures.**

  As per the conclusion made in the Electromagnetic Field Predictive report by Alphawave Mobile Network Services (2024):

  "*The maximum expected EMF exposure was computed at ground level and at first floor level in a 500x500 meter area around the proposed installation. If applicable, the maximum expected EMF exposure was also computed at all the accessible levels of any multi-storey buildings in the immediate area around the proposed installation.* ***The results obtained show that the expected EMF exposure is at least 24 times below the ICNIRP general public guidelines. In other words, the EMF exposure from the proposed installation will be compliant in terms of the ICNIRP guidelines, as subscribed to by the South African Health Products Regulatory Authority***".

  Department of Health issued a statement on 8 September 2020 on the Health Effects of Cellular Base Stations and Handsets. As per the statement:

  The numerous measurement surveys, which have been conducted around the world and in South Africa, have shown that the actual levels of public exposure as a result of base station emissions invariably are only a fraction of the ICNIRP guidelines, even in instances where members of the public have been really concerned about their exposure to these emissions. At present there is **no** confirmed scientific evidence that points to any health hazard associated with the very low levels of exposure that the general public would typically experience in the vicinity of a cellular base station. The Department is therefore satisfied that the health of the general public is not being compromised by their exposure to the microwave emissions of cellular base stations. This also means that local and other authorities, in considering the environmental impact of any particular base station, do not need to and should not attempt, from a public health point of view, to set any restrictions with respect to parameters such as distance to the mast, duration of exposure, height of the mast, etc.

  The Department of Health is not able to make any pronouncements about the specific levels of EMF that a member of the public would experience at any particular base station site when it is in operation. However, generally-speaking unless a person would climb to the top of a mast (or other structure supporting an antenna) and position him/herself not more than a few meters away right in front of the active antenna, such a person would have no real possibility of being exposed to even anywhere near the afore-mentioned ICNIRP guideline limits. Since these base stations are typically cordoned off by means of barbed wire fencing and locked gates/doors in order to protect the sensitive and expensive technology, getting to a mast and actually climbing it despite the afore-mentioned security measures would certainly not be considered responsible behaviour. Even then the only real threat to the health of the person would be falling at any height from the structure in question. Based on the results of numerous global and local surveys, the experience has been that the exposure to base station EMF at ground level is typically in the range of between 0.001 – 1.0 % of the afore-mentioned ICNIRP guideline limits. Against this background of available data, there would be no scientific grounds to support any allegation that adverse health effects might be suffered by a responsible member of the public due to the EMF emitted by a base station.

Visual – as confirmed by the VIA (VRM, 2024):

- "Although the tower is located on a prominent ridgeline that does have a wide-area viewshed, the ridgeline analysis found that the tower is centrally located along the 6km ridgeline, with the cell tower not located on 'peak' point, and not near the main hill-top 'peak' feature that is the main visual focal point.

The existing water reservoir and smaller cell tower structure as well as the build nature of the Monte Christo Estate, increases the visual absorption capacity of the area.

- The photomontages generated from the N2 Highway/ Hartenbos urban areas suggests that the grey colour, lattice type tower would not generate High or Very High levels of visual intrusion".

SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALTERNATIVES

1. Details of the alternatives identified and considered

1.1.	Property and site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred property and site alternative.	

The operator assessed various alternative sites in the vicinity before proceeding with this NEMA application.

Placement of the mast within Monte Christo's conservation area was rejected by their HOA, placement on the municipal water reservoir site was rejected by the municipality, placement as smaller towers attached to various structures within Monte Christo was not viewed as a viable alternative.

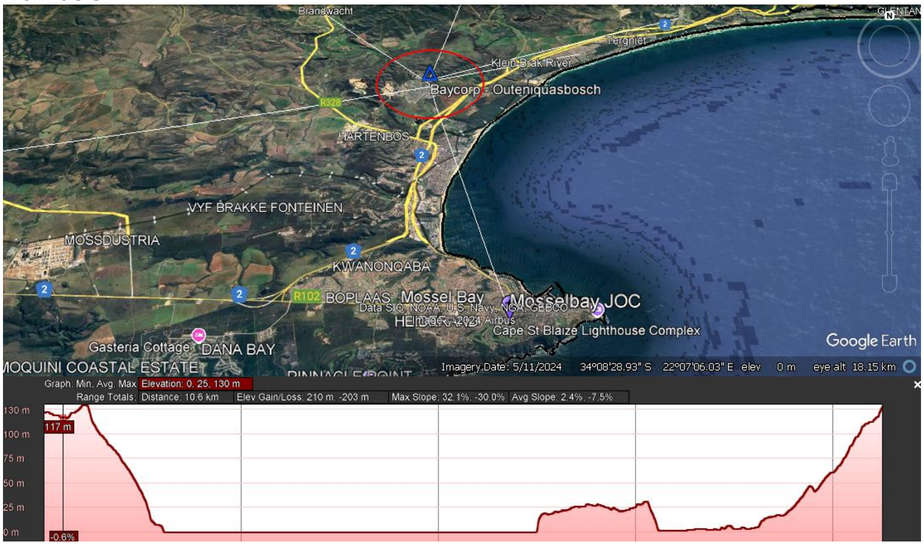
The site next to the reservoir within Outeniquasbosch Wildlife Village, in a disturbed area was viewed as the preferred alternative and is subject to this NEMA assessment process.

The preferred site alternative entails the construction of the tower on the apex of the hill within the eastern side of the estate (directly north of the Monte Christo residential development).

"The Illustrations used below is an indication of the line of sight variations from various vantage points towards the Outeniquasbosch Celltower and the Ground Elevation along that path will illustrate that in some instances the 30m is too low.

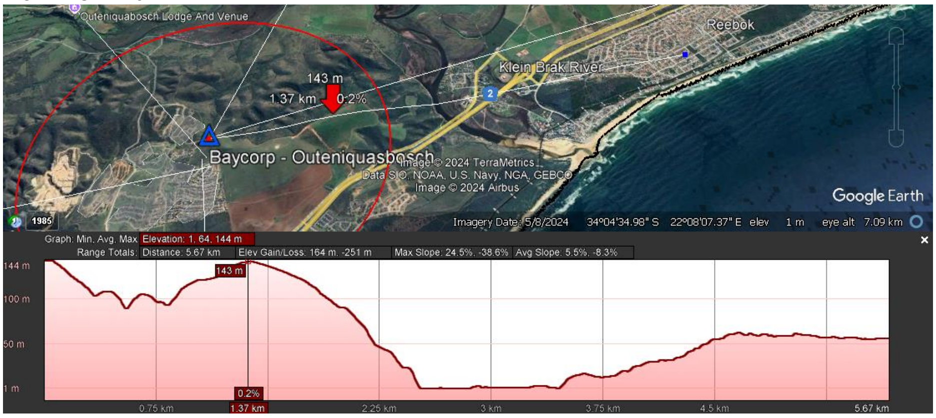
Elevation profile Route to Outeniquasbosch

From JOC



It is evident that a ground variance of approximately 16m-17m dipping just over the crest which necessitates a tower taller than the Municipal Bylaws.

From Klein Brak

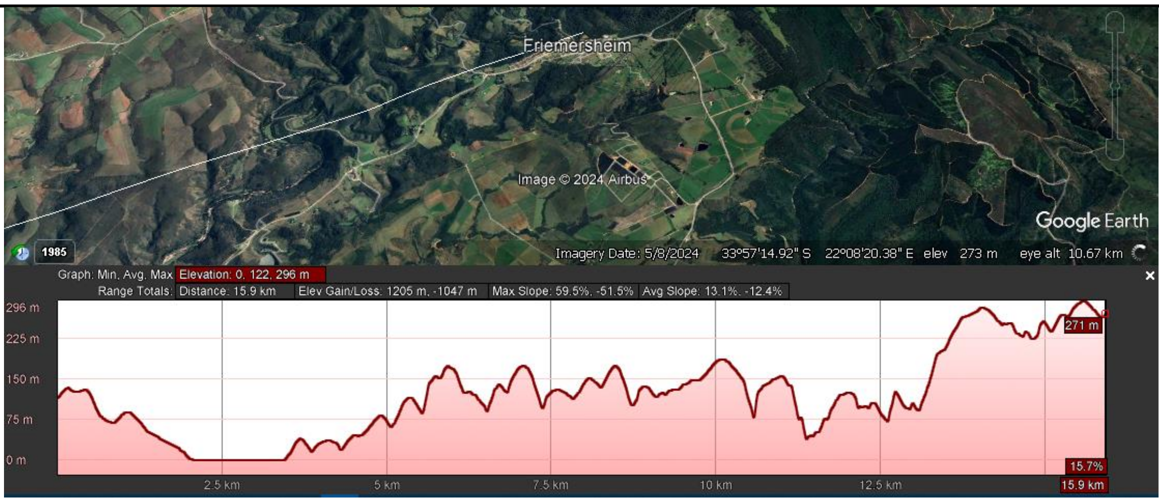


The 30m heigh would be sufficient

From Groot Brak

The 30m Tower will be sufficient to provide Line of Sight to that location or alternatively to be used as a link in a daisy-chain Microwave solution

From Friemersheim



Line of sight will be challenging but is possible to find a perfect location to obtain LOS.

While there are multiple vantage points to investigate , it is evident that a 30m tower will be well suited to the Mosselbay Community due to its placement" (BodyCorp, 2024)

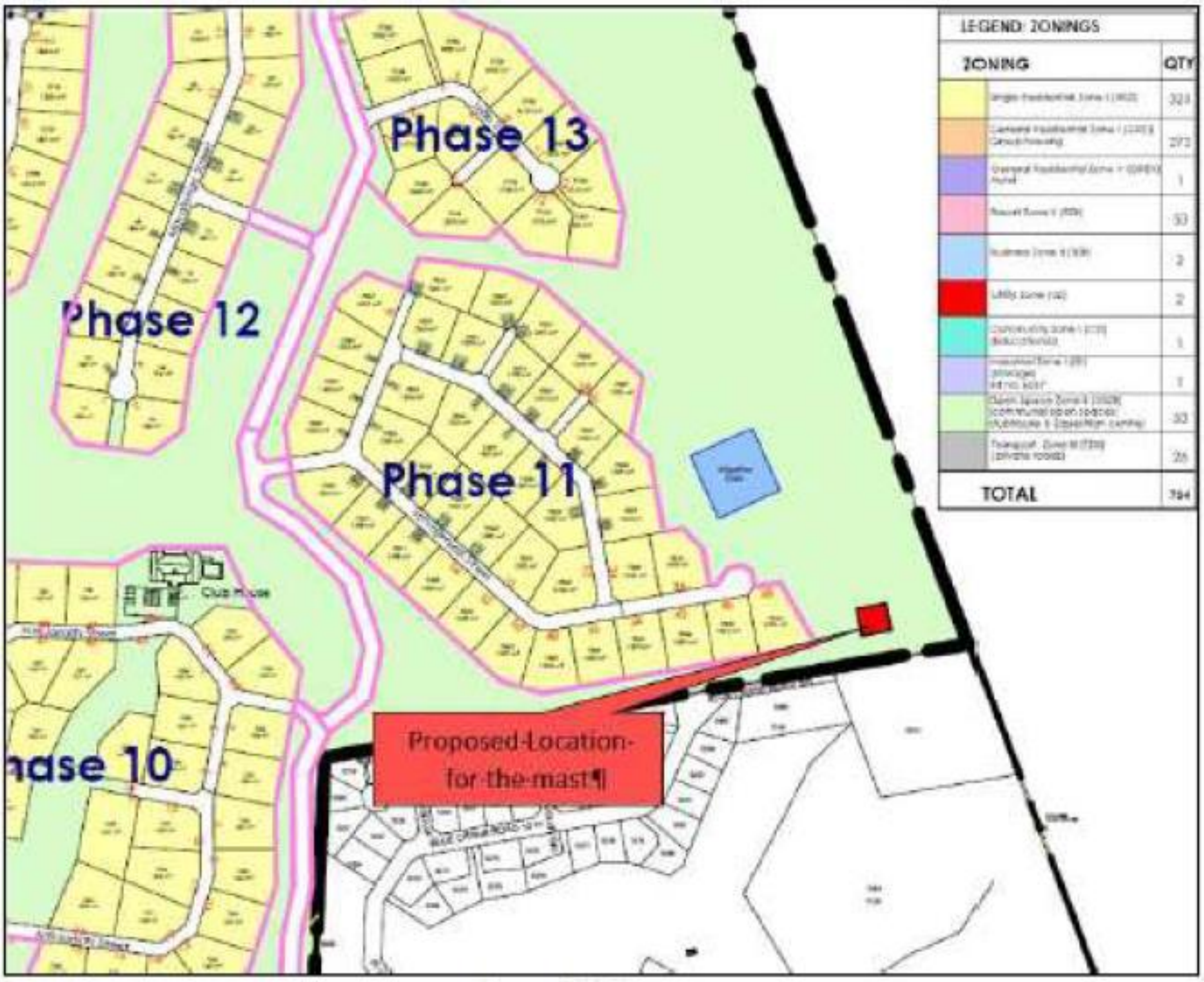


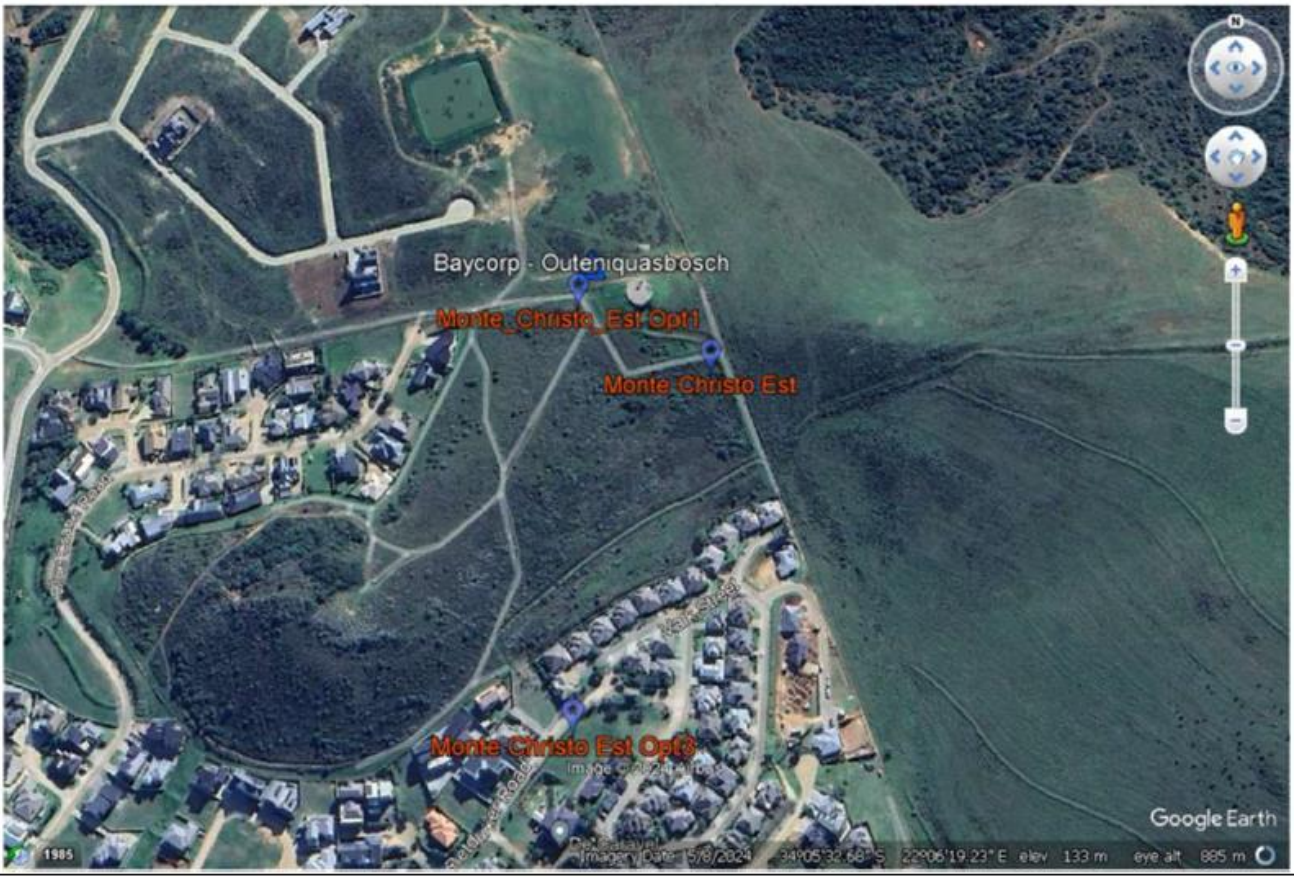
FIGURE 13: ZONING

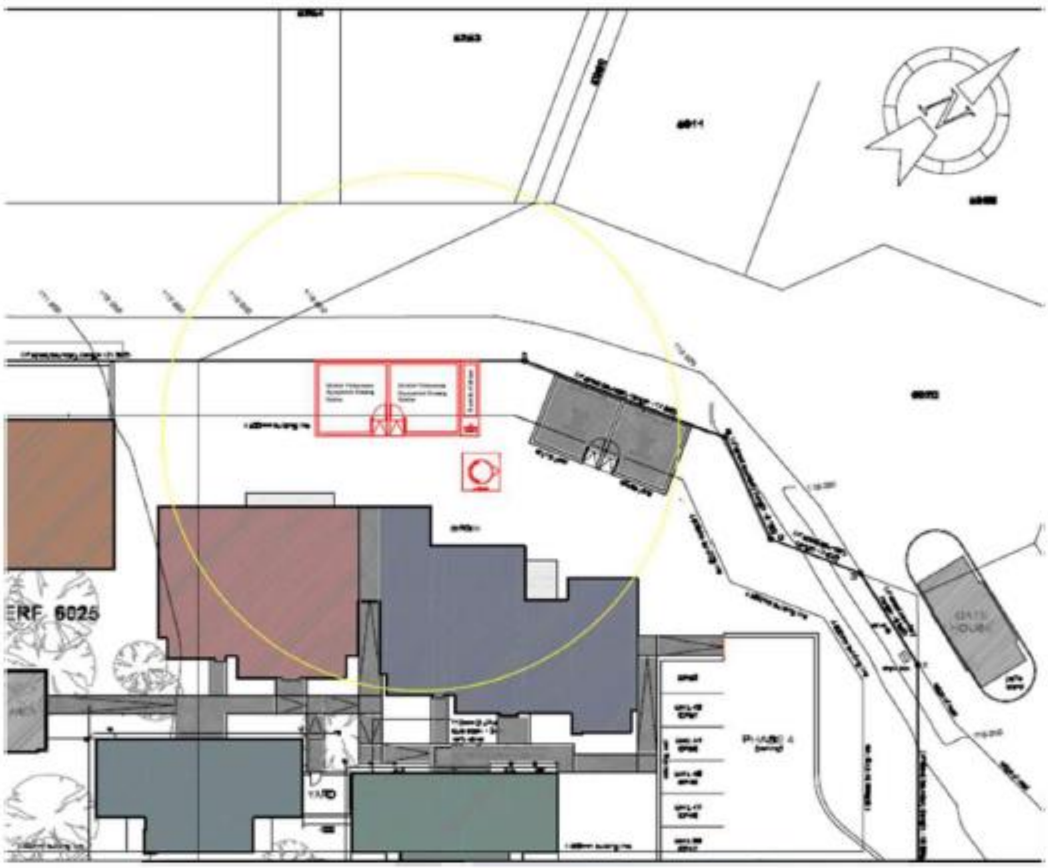
(Vreken, 2023)
The site is in the process of being zoned as a utility erf.

Provide a description of any other property and site alternatives investigated.

The operator assessed various alternative sites in the vicinity before proceeding with this NEMA application.

Placement of the mast within Monte Christo's conservation area was rejected by their HOA, placement on the municipal water reservoir site was rejected by the municipality, placement as smaller towers attached to various structures within Monte Christo was not viewed as a viable alternative.





The site alternative for the positioning of the tower approximately 40-60m east of the preferred site (still within open space zoning area part of the Outeniquasbosch SDP) was considered and REJECTED – it will place the tower at a lower level to reach the residents of the estates (Outeniquasbosch and Monte Christo). It will affect the line of sight for the Monte Christo and Outeniquasbosch residents and therefore will not provide enough coverage to meet the demands of these developments.

FIGURE 7: EXTRACT - SDP (ALTERNATIVE2)

Site alternative 2 (Vreken, 2024)

Provide a motivation for the preferred property and site alternative including the outcome of the site selectin matrix.

The owners at Outeniquasbosch have agreed to the proposed location.

The Monte Christo HOA rejected the placement of the tower within their conservation area as it would conflict with their ROD.

The municipality rejected the placement of the tower within the water reservoir site as there is not sufficient space.

Site preferred alternative selected as it is ideally positioned to provide sufficient mobile coverage as desired by the residents in the area.

It can accommodate all Mobile Operators as well as Wireless Internet Service Providers (WISP) at the selected site.

Provide a full description of the process followed to reach the preferred alternative within the site.

- **The site needed to be at a height where it can provide sufficient mobile coverage**
- **As per the visual specialist: "Although the tower is located on a prominent ridgeline that does have a wide-area viewshed, the ridgeline analysis found that the tower is centrally located along the 6km ridgeline, with the cell tower not located on 'peak' point, and not near the main hill-top 'peak' feature that is the main visual focal point" (VRM, 2024)**
- **The site forms part of the open space zone of the Outeniquasbosch SDP – the specialist confirmed that the site is heavily transformed and will not result in the loss of sensitive vegetation/habitat.**

Provide a detailed motivation if no property and site alternatives were considered.

No property alternative exists.
A site alternative was considered but rejected.

List the positive and negative impacts that the property and site alternatives will have on the environment.

Positive:

- **Best line of sight in order to provide the desired coverage for the residents of the surrounding areas**
- **The site does not contain any sensitive vegetation that should be avoided (as confirmed by the specialist)**
- **Provides coverage for the adjacent medical facilities at Monte Christo**

Negative

- **Some visual impact to the surrounding residents (to be mitigated)**

1.2.	Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred activity alternative.

The activity entails the construction of a cellular tower which exceeds 15m in height - there is a need for increased coverage in the area. No other activity will provide this.

Provide a description of any other activity alternatives investigated.

Placement of more towers within the area that fall below the NEMA height threshold could have been considered but would not have provided optimal coverage and would result in increased costs and visual impact associated with multiple 15m heigh towers which is not desirable. **Attaching masts to existing structures in order to avoid the NEMA threshold was also investigated but was not feasible.**
Provide a motivation for the preferred activity alternative.
The activity will provide additional coverage in the area as desired and needed.
Provide a detailed motivation if no activity alternatives exist.
The activity is specific for providing additional cellular coverage as required in the area
List the positive and negative impacts that the activity alternatives will have on the environment.
N/A – none investigated

1.3.	Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts

Provide a description of the preferred design or layout alternative.
The preferred design includes: • **A 30m lattice tower** • **Painted grey**
Provide a description of any other design or layout alternatives investigated.

Other potential designs that were rejected:

- **Construction of monopole tower**

Monopole Towers are simple single poles. Its elementary design reduces visual impact and is relatively simple to build, which is why this tower is preferred by tower developers and ranges from 18m-25m in height	The monopole is a solid structure and more likely to prove a nuisance as a visual impact when viewed from the R102 or approaching the Estate as it would break the skyline. As a solid structure, the surface area would be subjected to wind loading for the full height of the structure being 35m tall. A mitigating factor on the visual impact would be to paint the structure "battleship grey" to blend in with the background sky thus reducing the visual impact. Requires a crane to be erected and installed in place.

(Vreken, 2024)

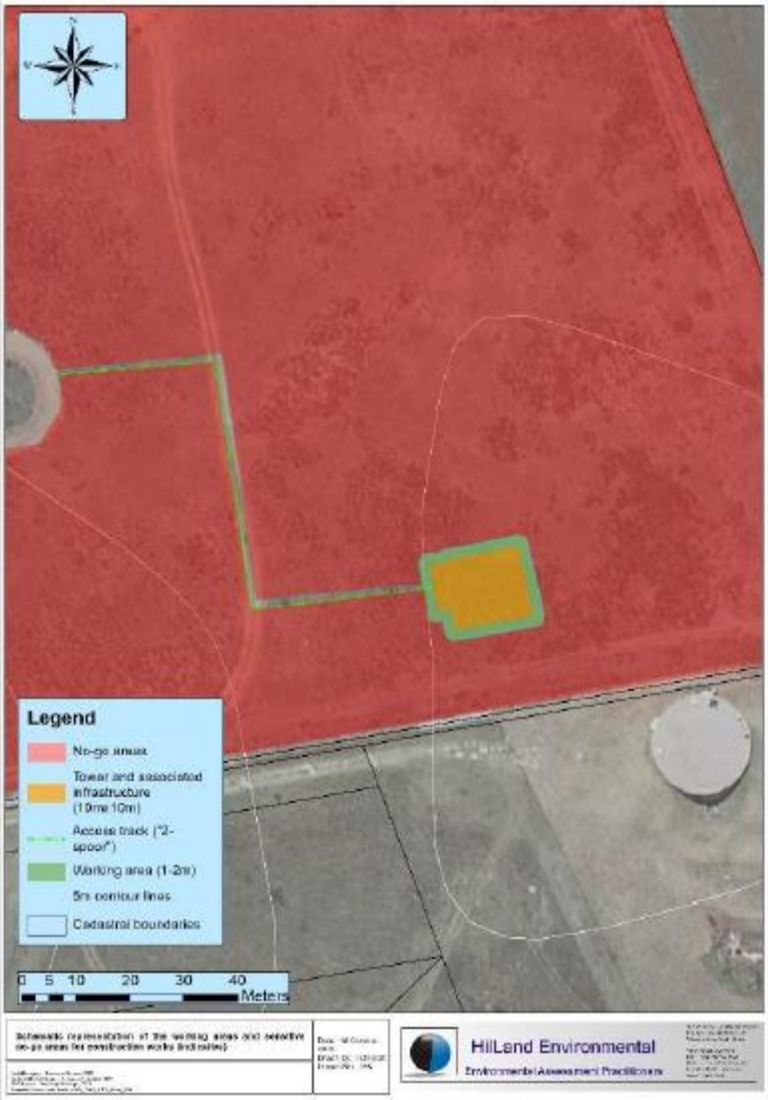
- **Construction of a stealth tower**

A stealth tower is a monopole tower but in disguise. They are usually in urban areas when they need to reduce the visual impact of the actual tower. There are different variations of a stealth tower: a broad leaf tree, a palm tree, a water tower, a flagpole, a light pole, a billboard, etc.	The stealth structures are monopoles and are solid structures and more likely to prove a nuisance as a visual impact when viewed from the R102 or approaching the Estate as it would break the skyline. Most Stealth structures are disguised as trees but are still solid structures the surface area would be subjected to wind loading for the full height of the structure being 35m tall. As the structure is disguised by foliage, the structural capacity of the tower is effectively reduced due to the increase in wind surface area to the structure leading to reduced structural capability and might not be able to accommodate all Mobile Operators and or Wireless Service Providers. Requires a crane to be erected and installed in place.

(Vreken, 2024) **Colour alternative that was rejected:** • **Colour alternative of painting it red and white "the photomontages generated from the N2 Highway / Hartenbos urban areas suggests that the grey colour, lattice type tower would not generate High or Very High levels of visual intrusion. (VRM, 2023)"** • **The construction of a 15m high tower vs 30m** • **The construction of a 35m lattice tower was applied for with SACAA, however, they only approved a 30m tower.**	
Provide a motivation for the preferred design or layout alternative.	
• **Red and white colours will have a larger visual impact and is not recommended by the visual specialist** • **"A tower restricted to 15m in height would not provide adequate coverage to the residential development areas of Outeniquasbosch and Monte Christo, where both areas currently lack effective cellular coverage. As such, more than one tower would be required to provide the same coverage. Should these 15m towers be built, they would have to be monopoles where the thickness of the structure would increase the vertical contrast of the structure in comparison to the thinner lattice type tower proposed. As there is no precedent for trees in the landscape, 'tree' mitigation towers would not be an effective mitigation and would increase the visual intrusion" (VRM, 2024).** • **SACAA approved a 30m lattice tower**	
Provide a detailed motivation if no design or layout alternatives exist.	
Alternatives have been assessed	
List the positive and negative impacts that the design alternatives will have on the environment.	
Positive impacts • **Grey will be less noticeable to casual observer** • **The lattice design will not increase the visual intrusion** • **30m tall tower will provide the required coverage** **Negative** • **The tower will have some visual impact**	
1.4.	Technology alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred technology alternative:	
Current cellular network technology will be attached to the tower as required. The tower design alternatives are described above.	
Provide a description of any other technology alternatives investigated.	
None investigated as this technology will provide the necessary cellular coverage that is required.	
Provide a motivation for the preferred technology alternative.	
N/A	
Provide a detailed motivation if no alternatives exist.	
N/A	
List the positive and negative impacts that the technology alternatives will have on the environment.	
N/A	
1.5.	Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred operational alternative.	
N/A	
Provide a description of any other operational alternatives investigated.	
N/A	
Provide a motivation for the preferred operational alternative.	
N/A	
Provide a detailed motivation if no alternatives exist.	
N/A	
List the positive and negative impacts that the operational alternatives will have on the environment.	
N/A	
1.6.	The option of not implementing the activity (the 'No-Go' Option).
Provide an explanation as to why the 'No-Go' Option is not preferred.	
Not constructing the tower will result in the needed and desired coverage not being provided to the residents within the urban edge. **If not done as proposed, other applications in the area will follow as there is an urgent need for increased coverage in the area.** **The need for increased connectivity in the urban edge/ urban area will persist.**	

1.7.	Provide and explanation as to whether any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist.
None	
1.8.	Provide a concluding statement indicating the preferred alternatives, including the preferred location of the activity.
The proposal will meet the need, desirability and demand within the area for increased cellular coverage **The site will not result in the loss of sensitive species or habitat** **Visual mitigation measures will reduce the visual impact of the tower** **A 30m tower will provide the sufficient coverage**	

2. "No-Go" areas

Explain what "no-go" area(s) have been identified during identification of the alternatives and provide the co-ordinates of the "no-go" area(s).
The no-go areas are regarded as the areas outside of the working area and access track as indicated on the SDP: 

3. Methodology to determine the significance ratings of the potential environmental impacts and risks associated with the alternatives.

Describe the methodology to be used in determining and ranking the nature, significance, consequences, extent, duration of the potential environmental impacts and risks associated with the proposed activity or development and alternatives, the degree to which the impact or risk can be reversed and the degree to which the impact and risk may cause irreplaceable loss of resources.
Seven rating scales will be considered when assessing potential impacts. These include: **extent;**

- duration;
- intensity;
- status of impact;
- probability;
- degree of confidence; and
- significance.

In assigning significance ratings to potential impacts before and after mitigation the following approach presented below is to be adhered to:

1. The core criteria for determining significance ratings are "extent", "duration" and "intensity". The preliminary significance ratings for combinations of these three criteria are given.

2. The status of an impact is used to describe whether the impact will have a negative, positive or neutral effect on the surrounding environment. An impact may therefore be negative, positive (or referred to as a benefit) or neutral.

3. Describe the impact in terms of the probability of the impact occurring and the degree of confidence in the impact predictions, based on the availability of information and knowledge.

4. Additional criteria to be considered, which could "increase" the significance rating if deemed justified, with motivation, are the following:
   - Permanent / irreversible impacts (as distinct from long-term, reversible impacts);
   - Potentially substantial cumulative effects; and
   - High level of risk or uncertainty, with potentially substantial negative consequences.

5. Additional criteria to be considered, which could "decrease" the significance rating if justified, with motivation, is the following:
   - Improbable impact, where confidence level in prediction is high.

6. When assigning significance ratings to impacts after mitigation:
   - First, consider probable changes in intensity, extent and duration of the impact after mitigation, assuming effective implementation of mitigation measures, leading to a revised significance rating; and
   - Then moderate the significance rating after taking into account the likelihood of proposed mitigation measures being effectively implemented. Consider:
     - Any potentially significant risks or uncertainties associated with the effectiveness of mitigation measures;
     - The technical and financial ability of the proponent to implement the measure; and
     - The commitment of the proponent to implementing the measure, or guarantee over time that the measures would be implemented.

7. The cumulative impacts of a project should also be considered. "Cumulative impacts" refer to the impact of an activity that may become significant when added to the existing activities currently taking place within the surrounding environment.

8. Where applicable, assess the degree to which an impact may cause irreplaceable loss of a resource. A resource assists in the functioning of human or natural systems, i.e. specific vegetation, minerals, water, agricultural land, etc.

A. Significance

The significance ratings are based on largely objective criteria and inform decision-making at a project level as opposed to a local community level. In some instances, therefore, whilst the significance rating of potential impacts might be "low" or "very low", the importance of these impacts to local communities or individuals might be extremely high. The importance which I&APs attach to impacts must be taken into consideration, and recommendations should be made as to ways of avoiding or minimising these negative impacts through project design, selection of appropriate alternatives and / or management.

The relationship between the significance ratings after mitigation and decision-making can be broadly defined as follows (see overleaf): substance

Significance rating	Effect on decision-making
VERY LOW; LOW	Will not have an influence on the decision to proceed with the proposed project, provided that recommended measures to mitigate negative impacts are implemented.
MEDIUM	Should influence the decision to proceed with the proposed project, provided that recommended measures to mitigate negative impacts are implemented.
HIGH; VERY HIGH	Would strongly influence the decision to proceed with the proposed project.

B. Extent

"Extent" defines the physical extent or spatial scale of the impact.

Rating	Description

LOCAL	Extending only as far as the activity, limited to the site and its immediate surroundings. Specialist studies to specify extent.
REGIONAL	Southern Cape. Specialist studies to specify extent.
NATIONAL	South Africa
INTERNATIONAL	

C. Duration

"Duration" gives an indication of how long the impact would occur.

Rating	Description
SHORT TERM	0 - 5 years
MEDIUM TERM	5 - 15 years
LONG TERM	Where the impact will cease after the operational life of the activity, either because of natural processes or by human intervention.
PERMANENT	Where mitigation either by natural processes or by human intervention will not occur in such a way or in such time span that the impact can be considered transient.

D. Intensity

"Intensity" establishes whether the impact would be destructive or benign.

Rating	Description
ZERO TO VERY LOW	Where the impact affects the environment in such a way that natural, cultural and social functions and processes are not affected.
LOW	Where the impact affects the environment in such a way that natural, cultural and social functions and processes continue, albeit in a slightly modified way.
MEDIUM	Where the affected environment is altered, but natural, cultural and social functions and processes continue, albeit in a modified way.
HIGH	Where natural, cultural and social functions or processes are altered to the extent that it will temporarily or permanently cease.

E. Loss of resources

"Loss of resource" refers to the degree to which a resource is permanently affected by the activity, i.e. the degree to which a resource is irreplaceable.

Rating	Description
LOW	Where the activity results in a loss of a particular resource but where the natural, cultural and social functions and processes are not affected.
MEDIUM	Where the loss of a resource occurs, but natural, cultural and social functions and processes continue, albeit in a modified way.
HIGH	Where the activity results in an irreplaceable loss of a resource.

F. Status of impact

The status of an impact is used to describe whether the impact would have a negative, positive or zero effect on the affected environment. An impact may therefore be negative, positive (or referred to as a benefit) or neutral.

G. Probability

"Probability" describes the likelihood of the impact occurring.

Rating	Description
IMPROBABLE	Where the possibility of the impact to materialise is very low either because of design or historic experience.
PROBABLE	Where there is a distinct possibility that the impact will occur.
HIGHLY PROBABLE	Where it is most likely that the impact will occur.
DEFINITE	Where the impact will occur regardless of any prevention measures.

H. Degree of confidence

This indicates the degree of confidence in the impact predictions, based on the availability of information and knowledge.

Rating	Description
HIGH	Greater than 70% sure of impact prediction.

MEDIUM	Between 35% and 70% sure of impact prediction.
LOW	Less than 35% sure of impact prediction.

I. Significance

"Significance" attempts to evaluate the importance of a particular impact, and in doing so incorporates the above three scales (i.e. extent, duration and intensity).

Rating	Description
VERY HIGH	Impacts could be EITHER: of high intensity at a regional level and endure in the long term; OR of high intensity at a national level in the medium term; OR of medium intensity at a national level in the long term.
HIGH	Impacts could be EITHER: of high intensity at a regional level and endure in the medium term; OR of high intensity at a national level in the short term; OR of medium intensity at a national level in the medium term; OR of low intensity at a national level in the long term; OR of high intensity at a local level in the long term; OR of medium intensity at a regional level in the long term.
MEDIUM	Impacts could be EITHER: of high intensity at a local level and endure in the medium term; OR of medium intensity at a regional level in the medium term; OR of high intensity at a regional level in the short term; OR of medium intensity at a national level in the short term; OR of medium intensity at a local level in the long term; OR of low intensity at a national level in the medium term; OR of low intensity at a regional level in the long term.
LOW	Impacts could be EITHER of low intensity at a regional level and endure in the medium term; OR of low intensity at a national level in the short term; OR of high intensity at a local level and endure in the short term; OR of medium intensity at a regional level in the short term; OR of low intensity at a local level in the long term; OR of medium intensity at a local level and endure in the medium term.
VERY LOW	Impacts could be EITHER of low intensity at a local level and endure in the medium term; OR of low intensity at a regional level and endure in the short term; OR of low to medium intensity at a local level and endure in the short term.
INSIGNIFICANT	Impacts with: Zero to very low intensity with any combination of extent and duration.
UNKNOWN	In certain cases it may not be possible to determine the significance of an impact.

J. Degree to which impact can be mitigated

This indicates the degree to which an impact can be reduced / enhanced.

Rating	Description
NONE	No change in impact after mitigation.
VERY LOW	Where the significance rating stays the same, but where mitigation will reduce the intensity of the impact.
LOW	Where the significance rating drops by one level, after mitigation.
MEDIUM	Where the significance rating drops by two to three levels, after mitigation.
HIGH	Where the significance rating drops by more than three levels, after mitigation.

K. Reversibility of an impact

This refers to the degree to which an impact can be reversed.

Rating	Description
IRREVERSIBLE	Where the impact is permanent.
PARTIALLY REVERSIBLE	Where the impact can be partially reversed.
FULLY REVERSIBLE	Where the impact can be completely reversed.

Determination and ranking of potential impacts Is based on years of experience working on similar developments across the same area as well as applying sound environmental knowledge informed by available information on site, vegetation, development type, current condition and other relevant factors that could/ will influence such a development.

4. Assessment of each impact and risk identified for each alternative

Note: The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment. The EAP may decide to include this section as Appendix J to this BAR.

Alternative:	Preferred alternative: Construction of a 30m lattice tower within the eastern side of Outeniquasbosch	No-go alternative: No construction of a lattice tower for additional coverage.
PLANNING, DESIGN AND DEVELOPMENT PHASE		
Potential impact and risk: **Ecological Impact**	**Loss of vegetation**	
Nature of impact:	**Negative**	**Neutral – no impact**
Extent and duration of impact:	**Local and long term**	
Consequence of impact or risk:	**Loss of non-sensitive vegetation as confirmed by the specialist**	
Probability of occurrence:	**Definite**	
Degree to which the impact may cause irreplaceable loss of resources:	**Low, no loss of resources as confirmed by the specialist**	
Degree to which the impact can be reversed:	**Irreversible, loss of vegetation is permanent**	
Indirect impacts:	**Loss of open space area**	
Cumulative impact prior to mitigation:	**Low**	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**	
Degree to which the impact can be avoided:	**High**	
Degree to which the impact can be managed:	**High**	
Degree to which the impact can be mitigated:	**High**	
Proposed mitigation:	**Implement EMPr** **Limit clearing to selected site area**	**N/A**
Residual impacts:	**Fragmentation of open space habitat however this is insignificant as the site area is minimal and is located within an area already disturbed**	
Cumulative impact post mitigation:	**Low**	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very low**	
Potential impact and risk: **Ecological and physical impacts**	**Increased runoff and erosion due to clearing of vegetation, construction of hard surfaces and compaction of surfaces, leading to changes in downslope areas**	
Nature of impact:	**Negative**	**Neutral – no impact**
Extent and duration of impact:	**Local and short term**	
Consequence of impact or risk:	**Movement of soil during earthworks (very minimal as there is a very limited catchment area)**	
Probability of occurrence:	**Probable**	
Degree to which the impact may cause irreplaceable loss of resources:	**Low, no loss in resources**	
Degree to which the impact can be reversed:	**Reversible, easier to mitigate**	
Indirect impacts:	**None anticipated**	
Cumulative impact prior to mitigation:	**Low**	**N/A**
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**	
Degree to which the impact can be avoided:	**High**	
Degree to which the impact can be managed:	**High**	
Degree to which the impact can be mitigated:	**High**	
Proposed mitigation:	**Use of silt fencing to prevent movement of silt internally while under construction** **Implementation of the erosion control measures**	

	Construction phase EMP silt movement management	
Residual impacts:	**No erosion as a result of construction**	
Cumulative impact post mitigation:	**Monitor the site around the fence to ensure no operational erosion**	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Very low**	
Potential impact and risk: **Socio-economic**	**Short term job opportunities during construction (limited)**	
Nature of impact:	**Positive**	**Negative no additional limited job opportunities**
Extent and duration of impact:	**Local and long-term**	
Consequence of impact or risk:	**Additional jobs**	**No additional jobs**
Probability of occurrence:	**Definite**	
Degree to which the impact may cause irreplaceable loss of resources:	**Low no loss in resources**	
Degree to which the impact can be reversed:	**Positive impact which is not required to be reversed**	**Reversible**
Indirect impacts:	**Increase economic contribution**	**Potential economic loss**
Cumulative impact prior to mitigation:	**Medium**	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low**	
Degree to which the impact can be avoided:	**Not required**	**High**
Degree to which the impact can be managed:	**High**	**High**
Degree to which the impact can be mitigated:	**Positive impact no mitigation required**	**N/A**
Proposed mitigation:	**No mitigation required for positive impact**	
Residual impacts:	**None**	
Cumulative impact post mitigation:	**None**	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Low positive**	**Low negative**
Potential impact and risk: **Visual impact**	**Construction-related nuisance, such as noise and dust** **Visual impact of construction**	
Nature of impact:	**Negative, neutral as the estate is in construction phase**	**No impact**
Extent and duration of impact:	**Local and short term**	
Consequence of impact or risk:	**Nuisance impacts as a result of the construction phase (although it will be very short- term)**	
Probability of occurrence:	**Definite**	
Degree to which the impact may cause irreplaceable loss of resources:	**Low, no loss in resources**	
Degree to which the impact can be reversed:	**Low**	
Indirect impacts:	**Some disturbance to neighbouring residents**	
Cumulative impact prior to mitigation:	**Low**	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very- High)	**Low negative**	
Degree to which the impact can be avoided:	**High**	
Degree to which the impact can be managed:	**Medium**	
Degree to which the impact can be mitigated:	**Medium**	
Proposed mitigation:	**As per EMPr recommendations the contractor must comply with the regulations pertaining to noise. SANS 10400 is applicable.** **Contractor to stick to municipal approved construction times.** **Work on public holidays and weekends to be avoided** **Control of dust during construction** **Site to be demarcated with green shade netting**	

Residual impacts:	**Managed nuisance impacts**	
Cumulative impact post mitigation:	**None**	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very- High)	**Low negative**	

OPERATIONAL PHASE		
Potential impact and risk: **Visual impact**	**Visual impact of the cellular tower**	
Nature of impact:	**Negative**	**No impact**
Extent and duration of impact:	**Local and permanent**	
Consequence of impact or risk:	**Visual impact of the lattice tower**	
Probability of occurrence:	**Definite**	
Degree to which the impact may cause irreplaceable loss of resources:	**Low**	
Degree to which the impact can be reversed:	**Irreversible, but can be mitigated**	
Indirect impacts:	**Impact on the sense of place**	
Cumulative impact prior to mitigation:	**Medium** **As per visual specialist** **Without mitigation, there is a potential that more dominant intervisibility with the other lattice mast (4km west approx.)**	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High** **As per visual specialist** **Without mitigation, visual intrusion from a higher structure, with increased colour contrast, is likely to generated High levels of visual intrusion.**	
Degree to which the impact can be avoided:	**Low**	
Degree to which the impact can be managed:	**High**	
Degree to which the impact can be mitigated:	**High**	
Proposed mitigation:	**As per visual specialist** • **No uplighting of the tower.** • **No branding on the tower.** • **The tower should be painted a mid-grey colour.** • **The base structures should be painted a mid-grey colour and located to the north-west of the tower where the existing mounding of the reservoir provides more visual screening.**	
Residual impacts:	**Mitigated visual impact of the lattice tower**	
Cumulative impact post mitigation:	**Low** **As per visual specialist** **With mitigation, the grey colour of the lattice structure generates limited visual contrast, where intervisibility would be reduced.**	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium** **As per visual specialist** **With mitigation, the optimal location that reduces the need for further cell towers to maintain the same cellular coverage, and well as allows for Medium levels of visual intrusion due to grey colour and lattice tower structure.**	
Potential impact and risk: **Socio-economic impact**	**Improved cellular connectivity within a residential area**	
Nature of impact:	**Positive**	**Negative**
Extent and duration of impact:	**Local and long term**	
Consequence of impact or risk:	**Improved cellular connectivity within residential area**	**No improved cellular connectivity**

Probability of occurrence:	**Definite**	**Definite however as this is needed and desired in the area, tower will be applied for by other parties**
Degree to which the impact may cause irreplaceable loss of resources:	**Low**	
Degree to which the impact can be reversed:	**Not required**	**N/A**
Indirect impacts:	**Positive economic impact**	**Negative economic impact**
Cumulative impact prior to mitigation:	**Medium**	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium**	
Degree to which the impact can be avoided:	**Positive impact not required to avoid**	**Cannot be avoided**
Degree to which the impact can be managed:	**N/A**	**N/A**
Degree to which the impact can be mitigated:	**N/A**	
Proposed mitigation:		
Residual impacts:		
Cumulative impact post mitigation:		
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**Medium positive**	**Medium negative**

DECOMMISSIONING AND CLOSURE PHASE **It is not likely that a cellular tower will be decommissioned, communications equipment will be continually upgraded. Depending on the lifespan of the tower is will be replaced with an improved tower at that future date – replacement is not viewed as decommissioning. Should the tower ever be removed, imported material should be removed from site and be recycled and the area returned to open space as with the surrounding area.**		
Potential impact and risk:		
Nature of impact:		
Extent and duration of impact:		
Consequence of impact or risk:		
Probability of occurrence:		
Degree to which the impact may cause irreplaceable loss of resources:		
Degree to which the impact can be reversed:		
Indirect impacts:		
Cumulative impact prior to mitigation:		
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)		
Degree to which the impact can be avoided:		
Degree to which the impact can be managed:		
Degree to which the impact can be mitigated:		
Proposed mitigation:		
Residual impacts:		
Cumulative impact post mitigation:		
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)		

SECTION I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEASURES

1.	Provide a summary of the findings and impact management measures identified by all Specialist and an indication of how these findings and recommendations have influenced the proposed development.

Visual:

- *The preliminary finding of the visual statement is that although the proposed tower exceeds the 15m specified height in the Mossel Bay Municipality By-Laws of 2021, the proposed 30m lattice structure should not constitute a fatal flaw. The following motivations are provided for the proposed tower landscape change:*
- *The proposed tower structure is located on periphery of the Mossel Bay urban edge in a low density wildlife estate and is not within in a high density urban landscape context. The perception of this landscape is more peri-urban and urban, with most of the viewshed coverage to the north rural in land-use.*
- *A tower restricted to 15m in height would not provide adequate coverage to the residential development areas of*

Outeniquasbosch and Monte Christo, where both areas currently lack effective cellular coverage. As such, more than one tower would be required to provide the same coverage. Should these 15m towers be built, they would have to be monopoles where the thickness of the structure would increase the vertical contrast of the structure in comparison to the thinner lattice type tower proposed. As there is no precedent for trees in the landscape, 'tree' mitigation towers would not be an effective mitigation and would increase the visual intrusion.

- *Locational mitigation variations evaluated, using the ridgeline for topographic screening to southern receptors, found that the tower located is optimal.*
- *The preliminary finding of the visual statement is that although the proposed tower exceeds the 15m specified height in the Mossel Bay Municipality By-Laws of 2021, the proposed 30m lattice structure should not constitute a fatal flaw. The following motivations are provided for the proposed tower landscape change:*
- *The proposed tower structure is located on periphery of the Mossel Bay urban edge in a low density wildlife estate and is not within in a high density urban landscape context. The perception of this landscape is more peri-urban and urban, with most of the viewshed coverage to the north rural in land-use.*
- *A tower restricted to 15m in height would not provide adequate coverage to the residential development areas of Outeniquasbosch and Monte Christo, where both areas currently lack effective cellular coverage. As such, more than one tower would be required to provide the same coverage. Should these 15m towers be built, they would have to be monopoles where the thickness of the structure would increase the vertical contrast of the structure in comparison to the thinner lattice type tower proposed. As there is no precedent for trees in the landscape, 'tree' mitigation towers would not be an effective mitigation and would increase the visual intrusion.*
- *Locational mitigation variations evaluated, using the ridgeline for topographic screening to southern receptors, found that the tower located is optimal.*

For these reasons, it is the recommendation of this assessment that the tower should be authorised with mitigation as follows:

- *No uplighting of the tower.*
- *No branding on the tower.*
- *The tower should be painted a mid-grey colour.*
- *The base structures should be painted a mid-grey colour and located to the north-west of the tower where the existing mounding of the reservoir would provide more visual screening.*

Terrestrial, aquatic, plant and animal specialist:

Conclusion drawn by specialist:

1. *No plant or animal species of concern / flagged were found nor are likely to occur on site*
2. *The site is confirmed to have LOW sensitivity with respect to the Terrestrial Plant and Animal Species Themes.*
3. *The Terrestrial Biodiversity Theme is reasoned to be LOW sensitivity based on the survey and history of the site.*
4. *No part of the property has importance to the natural wetland area mapped north east.*

Recommendations made:

- *Construction to be restricted to the site area indicated.*

The Municipality confirmed the following in their comment on the application : *It is clear from the abovementioned that a 30 m mast must be considered carefully and only permitted in exceptional circumstances. The Mossel Bay Municipality has initiated several initiatives to enhance safety and security in the larger Mossel Bay area. A substantial investment in the Mossel Bay Joint Operational Centre (JOC) has been implemented. The centre is fully operational with several crucial disciplines like SAPS, Fire Protection, Disaster Management, Traffic, Environmental unit and other departments operating out of the JOC to enable timeous an efficient reaction to any applicable situation. The JOC does rely on several "high sites" for communication purposes and several meeting has be held to discuss areas where new "high sites" out of the norm must be established to serve as main communication infrastructure used by several disciplines. The subject mast was identified as such crucial infrastructure which will not only benefit the owner of the mast and surrounding community but also the larger community.*

Spatially the 30m mast is supported due to the exceptional circumstances and need for a line-of-sight communication "high site" in the area. This does not in any way provide an indication that the proposal will be approved by the Municipality but acknowledge the exceptional circumstances surrounding the proposal. " J Roux, 2024

2.	List the impact management measures that were identified by all Specialist that will be included in the EMPr
Mitigation measures recommended by the specialists are listed above	
3.	List the specialist investigations and the impact management measures that will **not** be implemented and provide an explanation as to why these measures will not be implemented.
All mitigation measures are to be implemented	
4.	Explain how the proposed development will impact the surrounding communities.
• **The tower will result in some visual impact – this will be mitigated through implementation of the recommendations made by the visual specialist** • **The cellular coverage in the area will be improved by the proposal**	

Concerns regarding the impact on Health have been addressed by the Electromagnetic Fields Predictive Report: • **"The maximum expected EMF exposure was computed at ground level and at first floor level in a 500x500 meter *area around the proposed installation. If applicable, the maximum expected EMF exposure was also computed at all the accessible levels of any multi-storey buildings in the immediate area around the proposed installation. The results obtained show that the expected EMF exposure is at least 24 times below the ICNIRP general public guidelines. In other words, the EMF exposure from the proposed installation will be compliant in terms of the ICNIRP guidelines, as subscribed to by the South African Health Products Regulatory Authority"* (Alphawave Mobile Network Services, 2024).**	
5.	Explain how the risk of climate change may influence the proposed activity or development and how has the potential impacts of climate change been considered and addressed.
The proposal is not linked to any climate change risks	
6.	Explain whether there are any conflicting recommendations between the specialists. If so, explain how these have been addressed and resolved.
There are no conflicting recommendations	
7.	Explain how the findings and recommendations of the different specialist studies have been integrated to inform the most appropriate mitigation measures that should be implemented to manage the potential impacts of the proposed activity or development.
Reduction of visual impact The construction of a 30m tower rather than 2x15m towers as allowed by the Municipal by-laws and environmental regulations • numerous shorter towers which fall within the NEMA and municipal thresholds would achieve the desired outcome (increased coverage) but would have a greater impact (more visual intrusion). **Avoid impacts on sensitive vegetated areas/habitat** Although located in zoned open space as part of the SDP, the specialist confirmed that the site is transformed and will not impact on sensitive areas	
8.	Explain how the mitigation hierarchy has been applied to arrive at the best practicable environmental option.

• **Avoid impacts –**
  o **The development within sensitive vegetated area/habitat has been AVOIDED**
• **Minimise impacts –**
  o **Minimise the visual impact through constructing a 30m lattice tower instead of 2x 15m towers in order to provide the necessary coverage**
  o **Mitigation measures recommended by the visual specialist will be implemented to minimise the visual impact:**
    ▪ *No uplighting of the tower.*
    ▪ *No branding on the tower.*
    ▪ *The tower should be painted a mid-grey colour.*
    ▪ *The base structures should be painted a mid-grey colour and located to the north-west of the tower where the existing mounding of the reservoir would provide more visual screening.*
• **Rectify – rehabilitation of areas disturbed during construction**
• **Reduce – construction of 30m lattice tower rather than two or more 15m towers to provide the necessary coverage.**
• **Offset - none required**	

SECTION J: GENERAL

1. Environmental Impact Statement

1.1.	Provide a summary of the key findings of the EIA.
• **Additional cellular coverage is required in the area as there is currently a lack thereof and no tower in the nearby vicinity to provide the necessary coverage** • **Although the By-Law restricts tower to 15m – a 15m tower will not provide the necessary coverage and therefore two or more of them would be required to be constructed. As confirmed by the visual specialist this will have a larger visual impact** • **The positioning is required to allow for sufficient coverage** • **The site does not contain any sensitive habitat/vegetation** • **The thin design of a lattice tower will be less visually intrusive and a different design such as a tree will be out of context as there are no trees to visually mitigate the tower** • **The proposal will not impact on the land use rights of any property owners in the area** • **Alphawave confirmed that the EMF exposure is within the applicable guidelines**	
1.2.	Provide a map that that superimposes the preferred activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers. (Attach map to this BAR as Appendix B2)
The working area will be regarded as the area proposed for the tower and associated infrastructure and access track to the site. The tower and all associated communication infrastructure will be located within a defined fenced off area.	

1.3.	Provide a summary of the positive and negative impacts and risks that the proposed activity or development and alternatives will have on the environment and community.

Positive impacts:

- **No impact on sensitive vegetation**
- **Improved cellular connection in an area where there is a lack thereof**

Negative impacts

- **Some visual impact by the lattice tower**

2. Recommendation of the Environmental Assessment Practitioner ("EAP")

2.1.	Provide Impact management outcomes (based on the assessment and where applicable, specialist assessments) for the proposed activity or development for inclusion in the EMPr

The following objectives were identified in the assessment:

Objective: **Prevention of loss of natural vegetation**

Impacts to avoid:

- Unnecessary access into the open space area surrounding the site
- Unnecessary disturbance of topsoil and remaining vegetation around the site

Management actions:

- Limit disturbance to the site area selected and access track
- Clearly define any laydown areas for materials for ECO approval

- Contractors camp site to be defined in an area approved by the ECO where there is already disturbance
- Rehabilitation of any areas

Management Outcome:
- No disturbance of areas outside of the site area.

Objective: Prevention of soil erosion

Impacts to avoid:
- Unnecessary disturbance of soil
- Unnecessary disturbance of vegetation
- Loss of soil on disturbed areas

Management actions:
- Surround the working area with erosion mitigation measures – silt fencing, sand bags and other means of slowing water down and allowing sediment to be deposited before it is transported away from its origin.
- Only disturb the area where construction is to take place
- Stabilization and rehabilitation must be done following construction and to the satisfaction of the ECO to limit exposed areas

Management Outcome:
- Soil erosion will be kept to a minimum during construction will ensure that erosion does not become a problem.

Objective: Prevention of pollution

Impacts to avoid:
- Potential leaks from vehicles/construction machinery
- Spillages of hazardous substances
- Leakage of chemical ablution facilities
- Contamination run-off from the construction site during concrete works
- Waste, such as construction materials etc., which may be blown / washed away into the surrounding environment

Management actions:
- Vehicles and machinery must be well-maintained
- Drip-trays must be used for vehicles / machinery while standing in the camp site
- Leaks on construction vehicles to be immediately repaired or the vehicle removed from site until it no longer leaks.
- Ablution facilities must be well-maintained and regularly emptied
- Litter control essential throughout construction phase
- Cement / concrete must be mixed on impermeable surfaces, concrete to be brought to site as ready mix or batching areas must be surrounded by bunding to prevent the movement out of the area of spillage, no washing of any ready mix trucks on site
- Monitoring by contractor and ECO

Management Outcome:
- No contamination of the environment and adjacent open space area
- Good housekeeping

Objective: Prevention of impact of potential heritage resources

Impacts to avoid:
- Damage to potential heritage resources on the property

Management actions:
- As per the EMPr, should any heritage resources be discovered, work will cease and HWC will be contacted to advise further

Management Outcome:
- Potential heritage impacts are mitigated and avoided

2.2.	Provide a description of any aspects that were conditional to the findings of the assessment either by the EAP or specialist that must be included as conditions of the authorisation.

The Outeniquasbosch Environmental Control Officer (ECO) must be appointed to monitor implementation of the EMPr and mitigation measures (that includes mitigation measures provided by the specialists) during the construction phase.

2.3.	Provide a reasoned opinion as to whether the proposed activity or development should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be included in the authorisation.

The proposal should be authorised as the proposed site development plan and development concept has been assessed and supported by various specialists. Impacts have been assessed.

The tower will be located at the ideal position and location in order to provide the necessary service required in the area which will have positive socio-economic impacts. The proposal is in line with the need and desirability of the area. Furthermore, it is in line with the Municipal SDF and IDP.

Any negative impacts that cannot be avoided will be mitigated through the implementation of the EMPr and will be strictly adhered to.

The conditions should include strict adherence to the EMPr and appointment of an ECO to ensure compliance.	
2.4.	Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed.

Conclusion and recommendations have been made based on the following assumptions:

- **That the information provided and gathered to compile this report is correct;**
- **That the recommended mitigation methods that have been specified in this report and the approved EMPr will be complied with; &**
- **That stakeholders and interested and affected parties (I&APs) will submit relevant comments during the public participation process.**
- **It is assumed that all the impacts have been identified and that the proposed preferred alternative (construction of 30m lattice tower) will be accepted and approved.**

Uncertainties and gaps in knowledge:

Given the fairly simplistic and low impact nature of the proposal and taking into consideration that the property has residential development rights and are surrounded by other residential developments that require the cellular connection, it is not foreseen that there are any significant uncertainties or gaps in knowledge. The construction phase will be undertaken in accordance with an EMPr and no unexpected or unpredicted impacts have become evident to date and as such none are anticipated with the proposal.

2.5.	The period for which the EA is required, the date the activity will be concluded and when the post construction monitoring requirements should be finalised.
Construction only – EA validity period to be 5 years during which time construction and post construction monitoring requirements should be finalised.	

3. Water

Since the Western Cape is a water scarce area explain what measures will be implemented to avoid the use of potable water during the development and operational phase and what measures will be implemented to reduce your water demand, save water and measures to reuse or recycle water.
The operational phase will not use water

4. Waste

Explain what measures have been taken to reduce, reuse or recycle waste.
Only the construction phase will produce normal construction waste – mitigation measures are included in the EMPr

5. Energy Efficiency

8.1.	Explain what design measures have been taken to ensure that the development proposal will be energy efficient.
Solar can be installed as back-up power	

SECTION K: DECLARATIONS

I Pieter Dreyer van Zyl ID number 4808175015082 in my personal capacity or duly authorised thereto hereby declare/affirm that all the information submitted or to be submitted as part of this application form is true and correct, and that:

- I am fully aware of my responsibilities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), the Environmental Impact Assessment ("EIA") Regulations, and any relevant Specific Environmental Management Act and that failure to comply with these requirements may constitute an offence in terms of relevant environmental legislation;
- I am aware of my general duty of care in terms of Section 28 of the NEMA;
- I am aware that it is an offence in terms of Section 24F of the NEMA should I commence with a listed activity prior to obtaining an Environmental Authorisation;
- I appointed the Environmental Assessment Practitioner ("EAP") (if not exempted from this requirement) which:
  - meets all the requirements in terms of Regulation 13 of the NEMA EIA Regulations; or
  - meets all the requirements other than the requirement to be independent in terms of Regulation 13 of the NEMA EIA Regulations, but a review EAP has been appointed who does meet all the requirements of Regulation 13 of the NEMA EIA Regulations;
- I will provide the EAP and any specialist, where applicable, and the Competent Authority with access to all information at my disposal that is relevant to the application;
- I will be responsible for the costs incurred in complying with the NEMA EIA Regulations and other environmental legislation including but not limited to –
  - costs incurred for the appointment of the EAP or any legitimately person contracted by the EAP;
  - costs in respect of any fee prescribed by the Minister or MEC in respect of the NEMA EIA Regulations;
  - Legitimate costs in respect of specialist(s) reviews; and
  - the provision of security to ensure compliance with applicable management and mitigation measures;
- I am responsible for complying with conditions that may be attached to any decision(s) issued by the Competent Authority, hereby indemnify, the government of the Republic, the Competent Authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which I or the EAP is responsible in terms of the NEMA EIA Regulations and any Specific Environmental Management Act.

Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

14/05/2024

Signature of the Applicant: Date:

Zec 4 (pty) ltd 2005/030913/07, 1 Oupoot Street, Outeniquasbosch, Hartenbos 6520

Name of company (if applicable):

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

I ………**Inge Delport**…………………………, EAP Registration number ………**2019/1689**…….. as the appointed EAP hereby declare/affirm the correctness of the:

- Information provided in this BAR and any other documents/reports submitted in support of this BAR;
- The inclusion of comments and inputs from stakeholders and I&APs;
- The inclusion of inputs and recommendations from the specialist reports where relevant; and
- Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties, and that:
- In terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
  - am not independent, but another EAP that meets the general requirements set out in Regulation 13 of NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review EAP must be submitted);
- In terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- I have disclosed, to the Applicant, the specialist (if any), the Competent Authority and registered interested and affected parties, all material information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this application;
- I have ensured that information containing all relevant facts in respect of the application was distributed or was made available to registered interested and affected parties and that participation will be facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments;
- I have ensured that the comments of all interested and affected parties were considered, recorded, responded to and submitted to the Competent Authority in respect of this application;
- I have ensured the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- I have kept a register of all interested and affected parties that participated in the public participation process; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations;

Delport August 2024

Signature of the EAP: Date:

HilLand Environmental

Name of company (if applicable):

DECLARATION OF THE REVIEW EAP

I ……………………………………………………., EAP Registration number …………………………….. as the appointed Review EAP hereby declare/affirm that:

- I have reviewed all the work produced by the EAP;
- I have reviewed the correctness of the information provided as part of this Report;
- I meet all of the general requirements of EAPs as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the specialist (if any), the review specialist (if any), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

Signature of the EAP: Date:

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

Note: Duplicate this section where there is more than one specialist.

I ……… **David Hoare** …………, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or

  - am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);

- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;

- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and

- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

3 June 2024

Signature of the EAP: Date:

David Hoare Consulting

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

Note: Duplicate this section where there is more than one specialist.

I ……… **Stephen Stead** …………, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
  - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or

  - am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);

- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;

- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and

- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

3 June 2024

Signature of the EAP: Date:

VRM Africa

Name of company (if applicable):

DECLARATION OF THE REVIEW SPECIALIST

I ………………………………………………………., as the appointed Review Specialist hereby declare/affirm that:

- I have reviewed all the work produced by the Specialist(s):
- I have reviewed the correctness of the specialist information provided as part of this Report;
- I meet all of the general requirements of specialists as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

Signature of the EAP: Date:

Name of company (if applicable):